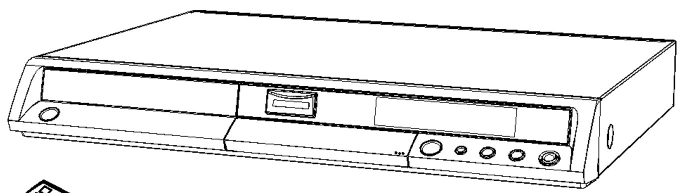
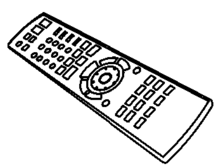
ORDER NO.MAD0607020CE

Service Manual

DVD Recorder





DMR-EX75EG	EUR7659YM0
DMR-EX75EB	EUR7659YG0
DMR-EX75EC	EUR7659T40
DMR-EX85EG	EUR7659YM0
DMR-EX85EB	EUR7659YG0

DMR-EX75EG
DMR-EX75EC
DMR-EX75EB
DMR-EX85EG
DMR-EX85EB

Vol.1

Colour

(S).......................Silver Type

NOTES:
This model´s RAM / Digital P.C.B
Module are - RFKNEX75EG
- RFKNEX75EB
- RFKNEX75EC
- RFKNEX85EG
- RFKNEX85EB

CAUTION:
Pairing of RAM Drive and Digital P.C.B. as "RAM / DIGITAL P.C.B. MODULE" have to be replaced together. If the pairing is changed, RAM Drive unit has to be re-aligned. Because the alignment data for RAM Drive Unit is stored in Digital P.C.B.

When replacing with Main P.C.B. or EEPROM, “UNFORMAT” indication is displayed and HDD must be formatted.

When replacing with HDD it is necessary to update the firmware. Please prepare the update disc.
(After that, FORMAT is necessary)

After that, **programme in the HDD will be lost.**
In detail, please refer to each content in this service manual.

Panasonic®

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

CONTENTS

1 SAFETY PRECAUTIONS

1.1. GENERAL GUIDELINES

1. Be careful during removing metal parts, sharp edges.
2. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
3. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
4. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.1.1. LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screw heads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between 1MΩ and 5.2MΩ.
   When the exposed metal does not have a return path to the chassis, the reading must be infinity.

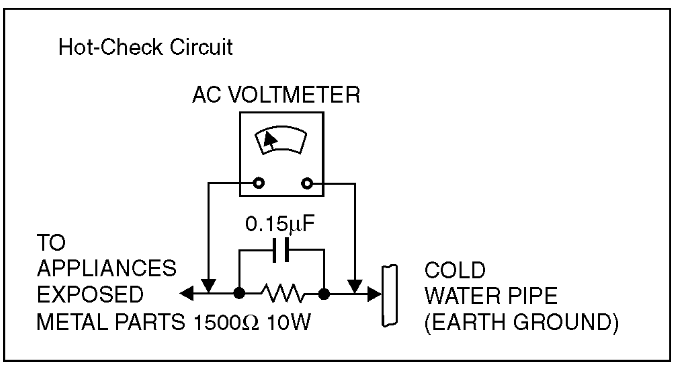


Figure 1

1.1.2. LEAKAGE CURRENT HOT CHECK

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5kΩ, 10 watts resistor, in parallel with a 0.15µF capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliampere. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

2 WARNING

2.1. PREVENTION OF ELECTROSTATIC DISCHARGE (ESD) TO ELECTROSTATIC SENSITIVE (ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatic Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistor-sand semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electrostatic discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

   Caution

   Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise hamless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device).

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety.
These parts are marked by ⚠ in the schematic diagrams, Exploded Views and replacement parts list.
It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

2.2. PRECAUTION OF LASER DIODE

CAUTION:

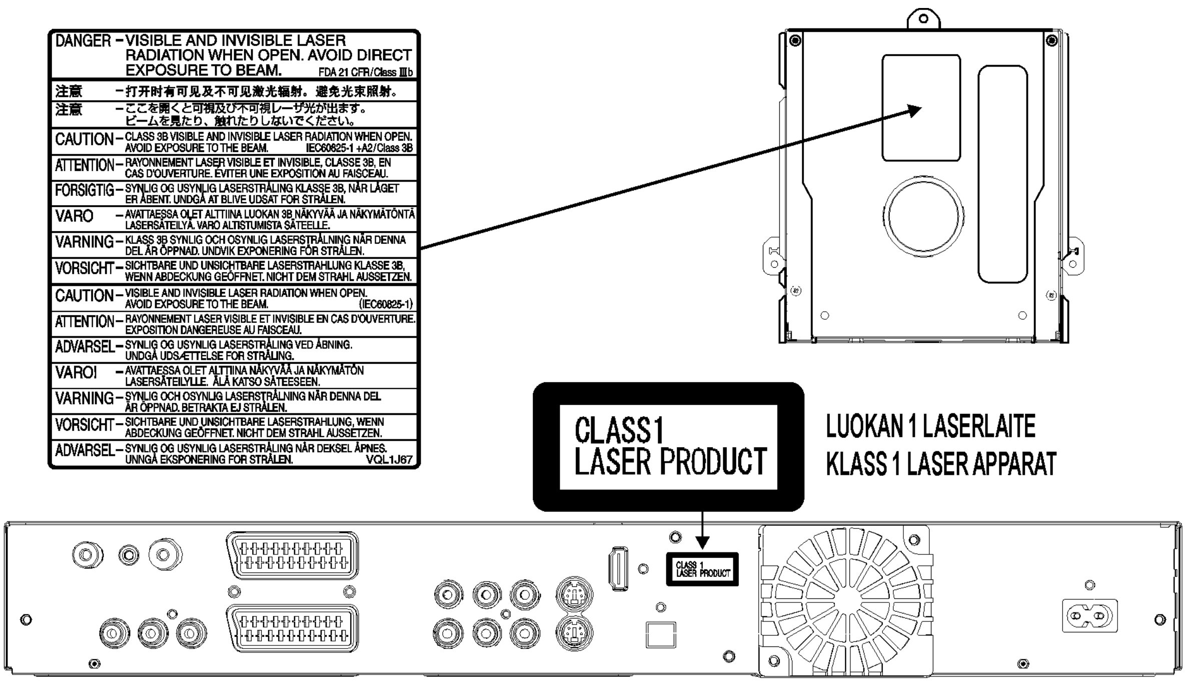
This product utilizes a laser diode with the unit turned “on”, invisible laser radiation is emitted from the pickup lens.
Wave length: 662 nm (DVDs)/780 nm (CDs)
Maximum output radiation power from pickup: 100µ W/VDE.
Laser radiation from the pickup lens is safety level, but be sure the followings:

1. Do not disassemble the optical pickup unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pickup unit. It was already adjusted.
3. Do not look at the focus lens using optical instruments.
4. Recommend not to look at pickup lens for a long time.

ACHTUNG:

Dieses Produkt enthält eine Laserdiode.
Im eingeschalteten Zustand wird unsichtbare Laserstrahlung von der Lasereinheit ausgestrahlt.
Wellenlänge: 662 nm(DVDs)/780 nm (CDs)
Maximale Strahlungsleistung der Lasereinheit: 100µ W/VDE.
Die Strahlung der eingeschalteten Lasereinheit ist ungefährlich, wenn folgende Punkte beachtet werden:

1. Die Lasereinheit nicht zerlegen, da die Strahlung an der freigelegten Laserdiode gefährlich ist.
2. Den werksseitig justierten Einstellregler der Lasereinheit nicht verstellen.
3. Nicht in die Fokussierlinse blicken.
4. Auch nicht mit optischen Instrumenten in die Fokussierlinse blicken.



CAUTION!
THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

2.3. SERVICE CAUTION BASED ON LEGAL RESTRICTIONS

General description about Lead Free Solder (PbF)

- The lead free solder has been used in the mounting process of all electrical components on the printed circuit boards used for this equipment in considering the globally environmental conservation.
- The normal solder is the alloy of tin (Sn) and lead (Pb). On the other hand, the lead free solder is the alloy mainly consists of tin (Sn), silver (Ag) and Copper (Cu), and the melting point of the lead free solder is higher approx.30 degrees C (86°F) more than that of the normal solder.

Service caution for repair work using Lead Free Solder (PbF)

- The lead free solder has to be used when repairing the equipment for which the lead free solder is used.
- To put lead free solder, it should be well molten and mixed with the original lead free solder.
- Remove the remaining lead free solder on the PCB cleanly for soldering of the new IC.
- Since the melting point of the lead free solder is higher than that of the normal lead solder, it takes the longer time to melt the lead free solder.
- Use the soldering iron (more than 70W) equipped with the temperature control after setting the temperature at 350±30 degrees C (662±86°F). When soldering or unsoldering, please completely remove all of the solder on the pins or solder area and be sure to heat the soldering points with the Pb free solder until it melts enough.

Definition of PCB Lead Free Solder being used

- The letter of “Pbf is printed either foil side or component side using the lead free solder.

PbF

Recommended Lead Free Solder (Service Parts Route.)

- The following 3 types of lead free solder are available through the service parts route.

RFKZ03D01K-----------(0.3mm 100g Reel)
RFKZ06D01K-----------(0.6mm 100g Reel)
RFKZ10D01K-----------(1.0mm 100g Reel)

Note

- Ingredient: tin (Sn), 96.5%, silver (Ag) 3.0%, Copper (Cu) 0.5%, Cobalt (Co) / Germanium (Ge) 0.1 to 0.3%

3 SERVICE NAVIGATION

3.1. SERVICE INFORMATION

This service manual contains technical which will alow service personnel's to understand and service this model.

Please place orders using the parts list and not the drawing reference numbers.

If the circuit is changed or modified, this information will be followed by supplement service manual to be filed with original service manual.

1. This service manual does not contain the following information, because of the impossibility of sevicing at component level.
   - Schematic Diagram, Block Diagram and P.C.B. layout of RAM/Digital P.C.B. Module and Back End P.C.B. Unit.
   - Parts List for individual parts of RAM/Digital P.C.B. Module.
   - Exploded View and Parts List for individual parts of RAM/Digital P.C.B. Module.
2. The following category are recycle module part. Please send them to Central Repair Center.
   - RAM/Digital P.C.B. Module: RFKNEX75EG
   - RAM/Digital P.C.B. Module: RFKNEX75EC
   - RAM/Digital P.C.B. Module: RFKNEX75EB
   - RAM/Digital P.C.B. Module: RFKNEX85EG
   - RAM/Digital P.C.B. Module: RFKNEX85EB
   - Back End P.C.B. Unit: REPD00311A (EX75EG/EX85EG)
   - Back End P.C.B. Unit: REPD00311C (EX75EB/EX85EB)
   - Back End P.C.B. Unit: REPD00311D (EX75EC)

3.2. CAUTION FOR DivX

Please give the information "Warning for Customers who use the DivX Video-on-Demand content." always to the customer together with the product, if you have to exchange EEPROM, P.C.B. including EEPROM or the product itself.

Also attach these information to every service part (EEPROM or P.C.B. including EEPROM).

This complete Information is needed for every customer who is using the DivX Video-on-Demand Serivce.

Appendix:

* Parts that memorize user's information are only on the EEPROM.

* The registration of Registration Code is possible for half a year up to 6 recorders up to 10 recorders a year.

Every replacement of EEPROM or P.C.B. including EEPROM spends one of this.

- Registration Code is memorized in the EEPROM (RFKFxxxxxxx)
- If the Power & Digital I/F P.C.B. or the EEPROM will be changed a new Registration Code different from the previous one will be generated.
- In this case the customer, who is useing DivX Video-on-Demand sercive, can not longer play any content that was or is purchased under that old registration code.
- Therefore the customer will need to register a new registration code.

*Copy this page and cut on the dotted line and give the lower half to your customer.

<u>Warning for Customers who use the DivX Video-on-Demand content.</u>

1. The registration code has been changed for the repair of the product or the product exchange.
2. Obtain and register a new registration code, otherwise you will no longer be able to play DivX Video-on-Demand content.
3. Follow the procedure on the DivX Video-on-Demand web site to register at
   http://vod.divx.com/
   * If you do not use the DivX Video-on-Demand content, please ignore this warning.

4 SPECIFICATION

Power supply:	AC220-240 V, 50/60 Hz
Power consumption:	33 W ±1,3 W Power save mode 2 W ±0,4 W
Dimensions and Mass:	430 (W) x 329 (D) x 58 (H) mm (excluding protrusions) / 4.3 kg
Operating temperature range:	+5 to +40 °C
Operating humility range:	10 to 80 % RH (no condensation)
Pickup Laser power:	CLASS1
Pickup Wave length:	DVD 662 nm / CD 780 nm No hazardous radiation is emitted with the safety protection
(NORSK) BØLGELENGDE:	DVD 662 nm / CD 780 nm
Laserstyrke	Ingen farling stråling sendes ut
Recording system:	MPEG2 (Hybrid VBR) Audio: Dolby Digital 2CH
Signal system:	PAL 625/50, NTSC 525/60
DVD Region number:	Region No. 2
Internal Hard Disc Drive:	160 GB (EX75) / 250 GB (EX85)
DVD Recording / Playable discs:	DVD-RAM (12 cm 4.7 GB) DVD-RAM (12 cm 9.4 GB) DVD-RAM (8 cm 2.8 GB) DVD-R (12 cm 4.7 GB) DVD-R (8 cm 1.4 GB) DVD-RW (12 cm 4.7GB) DVD+R (12 cm 4.7 GB) DVD+RW (12 cm 4.7 GB)
DVD approximate Recording time:	XP: 10 MBps (60 min) SP: 5 MBps (120 min) LP: 3 MBps (240 min) EP: 1.7 / 1.2 MBps (360 - 480 min)
Additional playable discs:	DVD-RAM (VR format) DVD-RW (VR format) DVD-R (MP3, DivX (Except EB), JPG) DVD-R DL, DVD+R DL DVD-Video, DVD-Audio CD-Audio (CD-DA), Video CD SVCD (IEC62107) CD-R, CD-RW (CD-DA, MP3, DivX (Except EB), JPG, VCD)
TV tuner system EG/EC-Model	PAL-BGH, SECAM-BG
TV tuner channel EG/EC-Model:	VHF: E2-E12 UHF: CH21-CH69 CATV: S01-S05 (S1-S3) CATV: S1-S20 (M1-U10) CATV: S21-S41
TV digital tuner (DVB-T) EG/EC	VHF: CH5-CH12 UHF: CH21-CH69
TV tuner system EB-Model	PAL-I
TV tuner channel EB-Model:	UHF: CH21-CH68
TV digital tuner (DVB-T) EB-Model	UHF: CH21-CH68
Active Antenna EG/EC-Model:	5V switched 50mA max.
Active Antenna EB-Model:	not provided
RF Converter Output:	not provided

SD Card Slot:	JPEG (Still Picture DCF Standard) TIFF (uncompressed) MPEG2 (rec. by Panasonic cam)
Campatible Cards:	SD Card, Multimedia Card miniSD™ Card (with adapter)
Card format:	FAT12, FAT16
Card picture pixels:	34x34 to 6144x4096
Video input AV1 / AV2:	21 pin connector (1.0 Vp-p 75 Ω)
Video input AV3 / AV4:	pin jack connector (1.0 Vp-p 75 Ω)
S-Video input AV1 / AV2:	21 pin connector (Y: 1.0 Vp-p, C: 0.3 Vp-p 75 Ω)
S-Video input AV3 / AV4:	pin jack connector (Y: 1.0 Vp-p, C: 0.3 Vp-p 75 Ω)
RGB Video input AV3 (PAL):	21 pin connector (0.7 Vp-p 75 Ω)
DV input:	IEEE 1394 Standard 4 pin
Video output AV1 / AV2:	21 pin connector (1.0 Vp-p 75 Ω)
FBAS Video output (composit):	pin jack connector (1.0 Vp-p 75 Ω)
S-Video output AV1:	21 pin connector (1.0 Vp-p 75 Ω)
S-Video output (cinch):	pin jack connector (1.0 Vp-p 75 Ω)
S-Video output:	S connector (1.0 Vp-p 75 Ω)
RGB Video output AV1:	21 pin connector (0.7 Vp-p 75 Ω)
Component Video output:	Y pin jack (1.0 Vp-p 75 Ω) PB pin jack (0.7 Vp-p 75 Ω) PR pin jack (0.7 Vp-p 75 Ω)
HDMI output (19 pin type A):	Version 1.2a (EDID Vers. 1.3)
Audio input AV1 / AV2:	21 pin connector (-6 dBV 500 mV)
Audio input AV3 / AV4:	pin jack (-6 dBV 500 mV)
Audio output (cinch):	pin jack (-6 dBV 500 mV)
Optical output:	PCM, Dolby Digital, DTS, MPEG

Note:

Specifications are subject to change without notice.

Mass and dimensions are approximate.

■ Build-in decoders: You can play discs with following symbols

5 NEW FEATURE

5.1. ABOUT DivX (EXCEPT EB)

5.1.1. GENERAL

DivX is a new video compressing format that is applied

MPEG-4 technology to improve quality and the compressibility and it is developed by the DivXNetworks, Inc., Video file of high resolution and the high picture quality can be made thought it is a high compressibility.

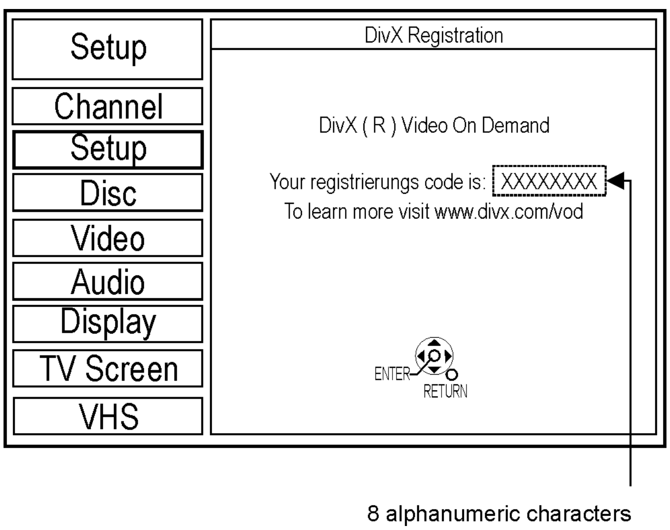
DivX codec is necessary for converting video to DivX file and playback files made.

5.1.2. OPERATING INSTRUCTIONS ABOUT DivX VIDEO-ON-DEMAND CONTENT

DivX Video-on-Demand (VOD) content is encrypted for copyright protection. In order to play DivX VOD content on this unit, you first need to register the unit.

Follow the online instructions for purchasing DivX VOD content to enter unit's registration code and register unit. Visit www.divx.com/vod for mor information.

Display unit's registration code:



- We recommend that you make a note of this code for future reference.
- After playing DivX VOD content for first time, another registration code is then displayed in "DivX Registration". do not use this registration code to purchase DivX VOD content. If you use this code to purchase DivX VOD content and the play content on this unit, you will no longer be able to play any content that you purchased using previous code.
- If you purchase DivX VOD content using a registration code different from this unit's code, you will not be able to play this content. ("Authorization Error" is displayed.)

Some DivX VOD content can only be played a set number of times.

When you play this content, remaining number of plays is displayed. You cannot play this content when number of remaining plays is zero. ("Rental Expired" is displayed.)

When playing this content

- Number of remaining plays is reduced by one if
  - you press [POWER]
  - you press [STOP]
  - you press [backwards SKIP], [backwards SLOW / SEARCH] or [forwards SLOW / SEARCH] etc. and arrive at another content or start of content being played.
  - scheduled [DRIVE SELECT] to change drive

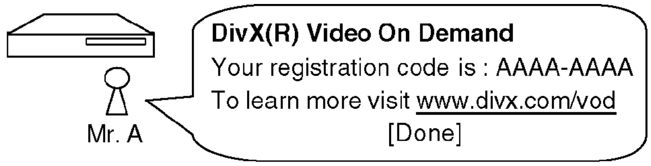
* Resume functions do not work.

Typical Playback procedure of DivX VOD (Video On Demand):

Case 1	When DivX VOD is used newly.
Case 2	When EEPROM or P.C.B. includin EEPROM was replaced for repairing.
Case 3	When recorder was exchanged to another recorder for repairing.
Case 4	When customer own second recorder.
Case 5	When owner of recorder was changed to another.

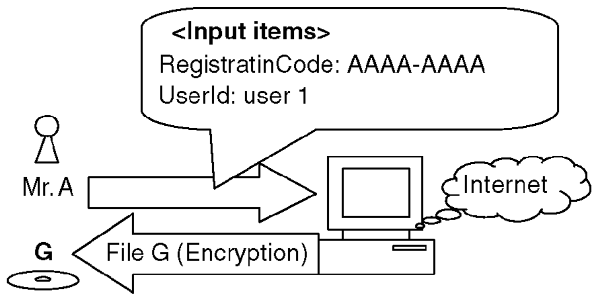
CASE 1	WHEN DivX IS USED NEWLY

Registration Code display (code is an example)

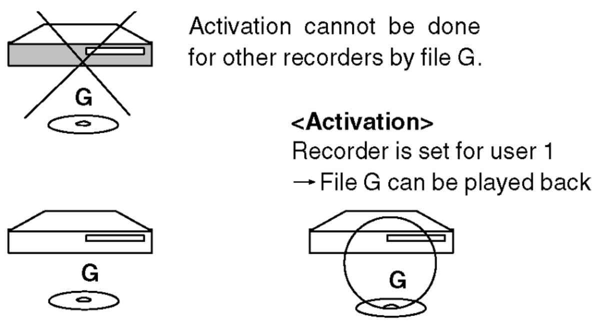


Case 1

Activation: File obtaining (code/ID are examples)



Activation: File Playback

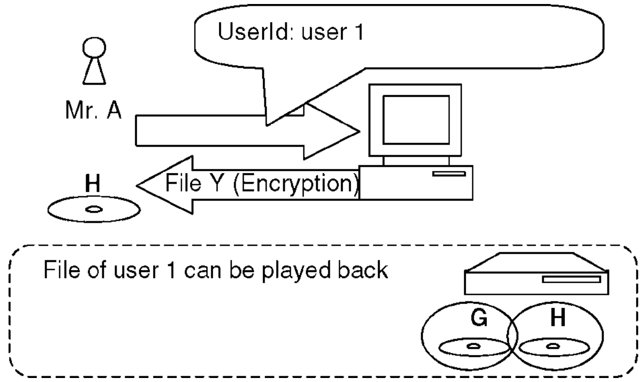


Registration Code display (code is an example)



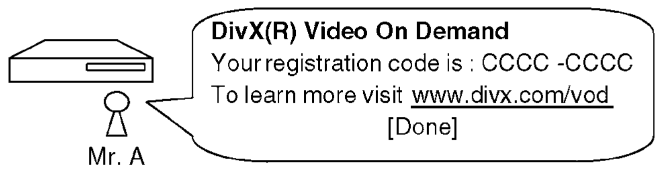
***The code different from code before Activation is displayed.**
(This code is unnecessary for Mr. A)

Ovtainment/Playback of additional file after Activation (code/ID is an example)



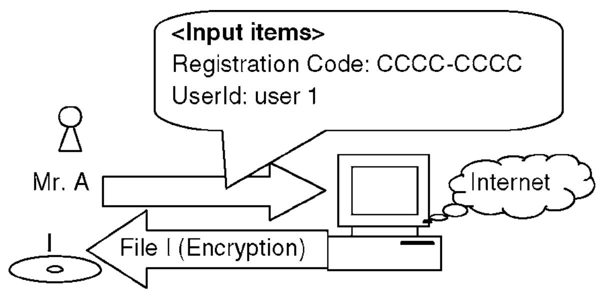
CASE 2	WHEN EEPROM OR P.C.B. INCLUDING EEPROM WAS REPLACED FOR REPAIRING
CASE 3	WHEN RECORDER WAS EXCHANGED TO ANOTHER RECORDER FOR REPAIRING

New Registration Code is displayed (code is an example)

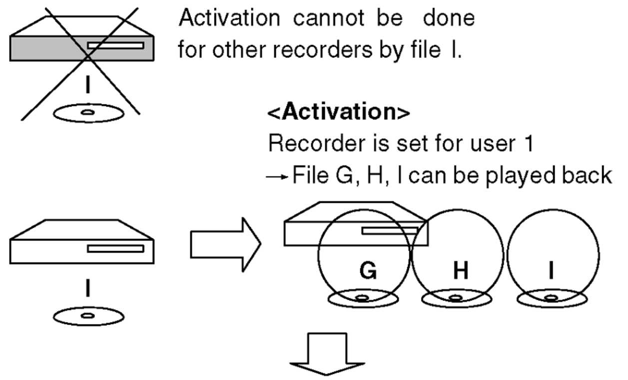


Case 2

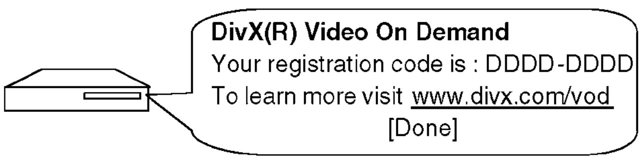
Activation: File obtaining (code/ID are example)



Activation: File Playback

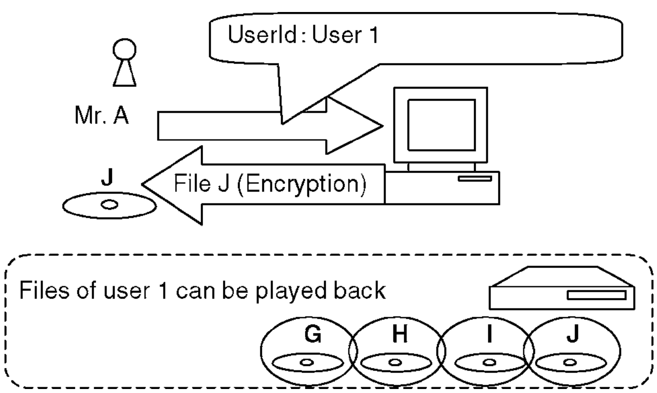


Registration Code display after Activation (example)



The code different from code before Activation is displayed.
(This code is unnecessary for Mr. A)

Obtainment/Playback od additional file after Activation (code/ID is an example)



Case 3

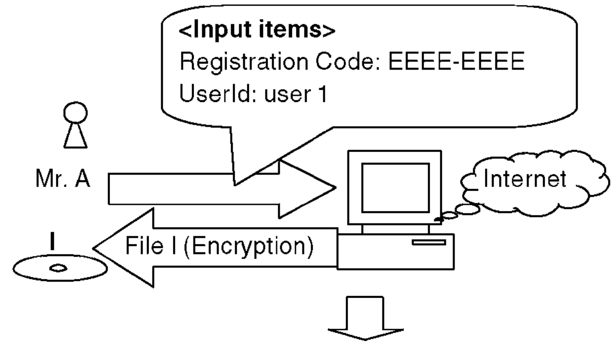
CASE 4	WHEN CUSTOMER OWN SECOND RECORDER

Registration Code display of second recorder (code is an example)

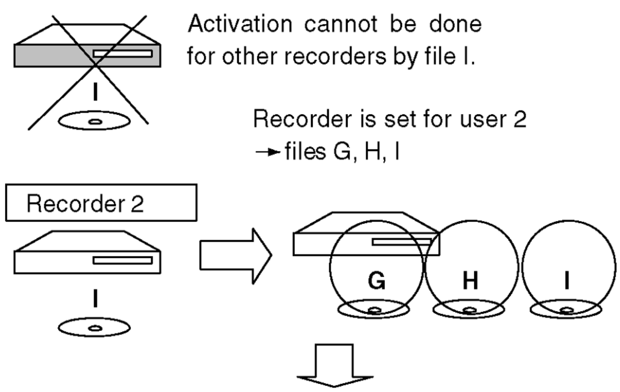


Case 4

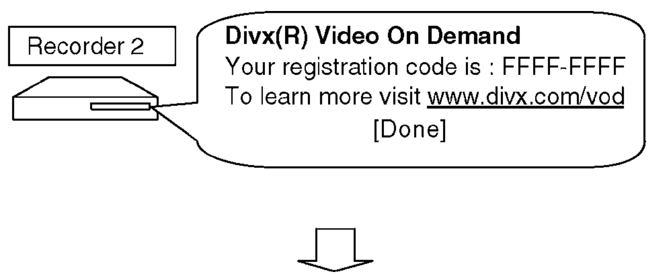
Activation: File obtaining (code/ID are example)



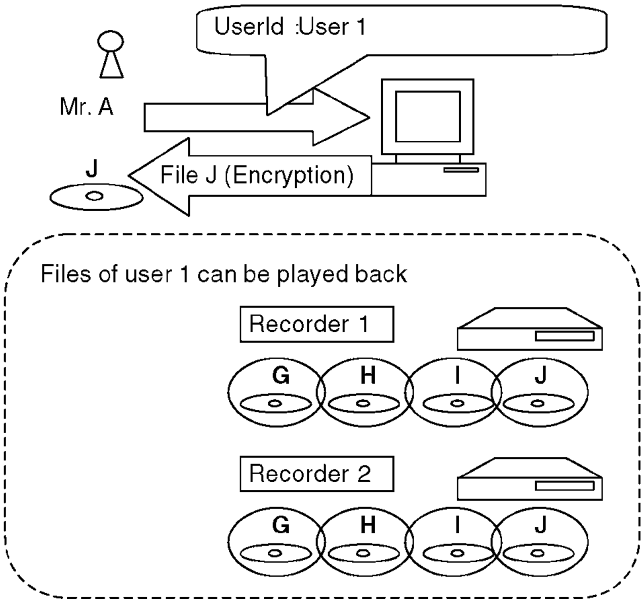
Activation: File Playback



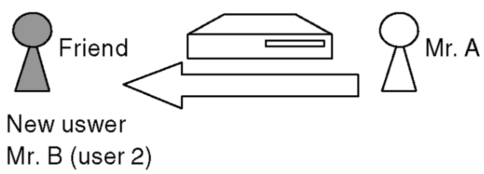
Registration Code display after Activation (example)



Obtainment/Playback od additional file after Activation
(code/ID is an example)



CASE 5	WHEN OWNER OF RECORDER WAS CHANGED TO ANOTHER

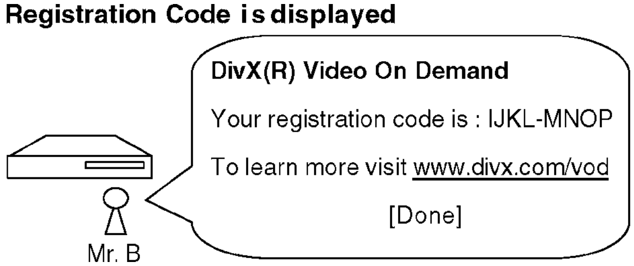


It is necessary to update information on the recorder

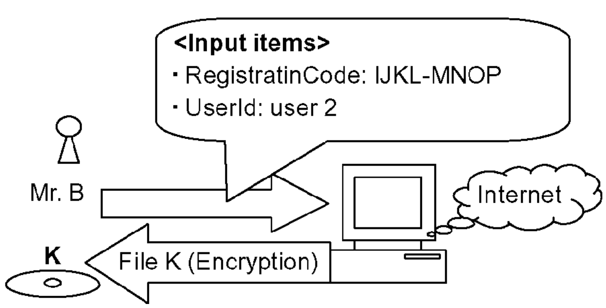
Case 5

Activation

Registration Code is displayed

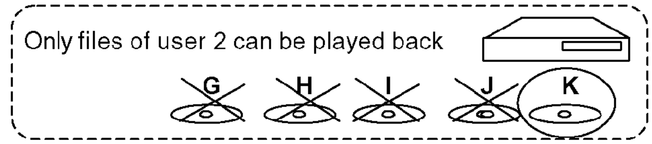


Activation: File obtaining (code/ID are example)



Activation: File Playback

<Activation>
Recorder is set for user 2
→ Only file K can be played back



* File G is an Activation file too, but Activation is not done because the code when obtaining it is different.

FILE KIND

(There are two kinf of Activation files as follows too.)

- Rental: There is a playback limitation
- Purchase: Unrestricted

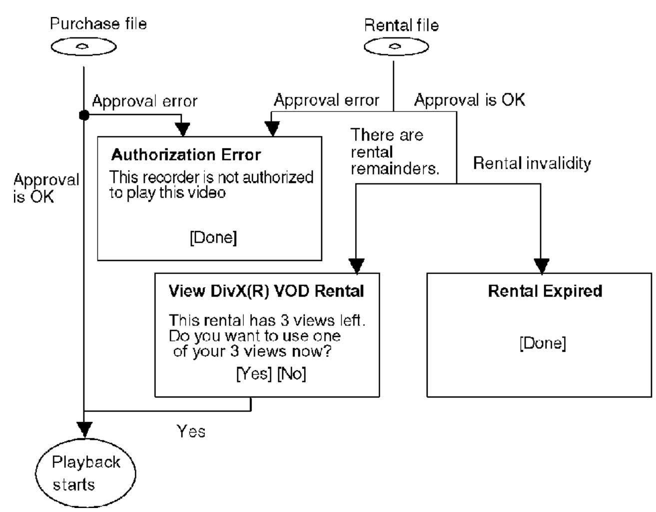
Also there is next file as DRM files besides the above-mentioned.

- Base:
  It is not necessary to approve though the contents is being endode.
  If it is recorder/player for DRM, any can play back. (It is the same as usual DivX file when seeing from user.)

SCREEN SHIFT (Error display)

Wheter approval is OK or not.

Wheter the recorder is corresponding to User information on the file or not.



5.1.3. ABOUT DivX DRM

Divx file includes file to which DRM(Digital Right Management) is applied and file not applied. This item is a content that relates only in treating file to which DRM is applied.

1. Registration Code display function
2. User's registration and approval function
3. Rental management function

5.1.3.1. REGISTRATION CODE DISPLAY FUNCTION

Registration Code is alphanumeric character sequence 8 bytes inputted as recorder information, in case a use purchases or rent a DivX DRM file in a network. Registration code is a character sequence generated at random, and differs in each recorder. Moreover, Registration code is updated by new user authentication ever if same recorder.

5.1.3.2. USER'S REGISTRATION AND APPROVAL FUNCTION

- Only one user can register for one recorder. If user's
  registration is not done with the recorder, DivX file cannot
  be played back.
- User's registration is performed only when a DivX DRM
  file is first chosen by recorder
- DivX DRM file that can perform user's registration is only a file that is registered Registration Code and purchased or rented.
- User authentication is performed whenever DivX DRM file is played back. Error message is displayed when failing in user's registration and approval.

5.1.3.3. RENTAL MANAGEMENT FUNCTION

There are purchase file without registration of number of playback and rental files with registration of number of playback as Divx file. Number of playback of rental file is counted by the recorder. When rental file is played, remaining number of times that can be played back will be shown to users, recorder requests users to input yes or no. Following specifications have been installed for the rental files in the purpose to clarify the count condition of number of times of playback.

- Conditions on counting number of times of play.
  1. When a file was opened successfully. (At the time of playback start)
  2. When you have done review operation from the start. (Skip to file head)
     - At this time, remaining number of times that can be played back and confirmation message
       [Do you play really?] are displayed.
     - When the playback point has been skipped to the top of title, number of playback is not counted if the top of title was not recognized.
     - Even if the power failure occurs after start of playback of rental file, number of times of playback counted at start of the playback is held as it is.
       (Though playback stops by power failure,
       the number of times of playback is not counted.)

  When it has reached head of title, the playback is ended, and screen becomes DivX menu (There is no resume) and then cursor is located on title that has been played back.Then if the same file was continuously played back, it begins to playback from the file head.

  Note:

  Above mentioned stored user information and number of times of playback are not erased by update of firmware or by initialization by test mode.

5.2. HDAVI CONTROL (HDMI LINK)

Linked operations by HDAVI Control (HDMI Link)

5.2.1. WHAT IS HDMI

HDMI is abbreviation of [High-Definition Multimedia Interface], and is digital interface standard for next generation TV corresponding to follows.

1. Non-compressing high quality digital image
2. Digital transmission of multi channel digital audio.
3. Two way communication of control signal of control straightening between equipments.

Cable	Transmission method	Directionality	Transmission signal	Feature
HDMI Cable	Digital (~4.455Gbps)	One-way	Digital image (none-compression high-definition television image)	Clock line in one system and data line in three systems can high-speed communicate high reliability because of balance communication that uses three respectively every one system. Moreover, because high-speed data line in three system can be used at same time, it has ten of other digital cables times or more transmission ability. And can transmit high-definition television image of non-compression, 24 bit high sound quality PCM voice of multi-CH of DVD audio (to 6ch) and Bit stream signal of surround to 8ch of DVD video (5.1ch, 6.1ch, and 7.1ch, etc.) as a digital signal of no deterioration. It has power supply line and a interactive control signal line communication independent of AV signal, a Cd can an advanced control between equipments. Therefore it can correspond to making of AV equipment in the future highly a network.
		One-way	Digital Audio (6ch/24 bit high sound quality PCM of DVD audio/Bit stream of surround to 8ch of DVD video)	
		Interactive	Digital control signal (Advanced control between equipments)	

Pin Name

1	TMDS Data2(+)	11	TMDS Clock(shield)
2	TMDS Data2(shield)	12	TMDS Clock(-)
3	TMDS Data1(-)	13	CEC (Linked operation control)
4	TMDS Data1(+)	14	NC
5	TMDS Data1(shield)	15	SCL
6	TMDS Data2(-)	16	SDA
7	TMDS Data0(+)	17	Ground
8	TMDS Data0(shield)	18	+5v Power
9	TMDS Data0(-)	19	Hot Plug Detect
10	TMDS Clock(+)		

Pin layout of plug of HDMI cable seen from outside.

1	3	5	7	9	11	13	15	17	19
2	4	6	8	10	12	14	16	18	Shell

5.2.2. LINK FUNCTIONS

Functions
(1) Automatic Input switch
(2) Link of Power

5.2.3. OUTLINE OF EQUIPMENTS LINKED FUNCTIONS

1. Automatic Input switch

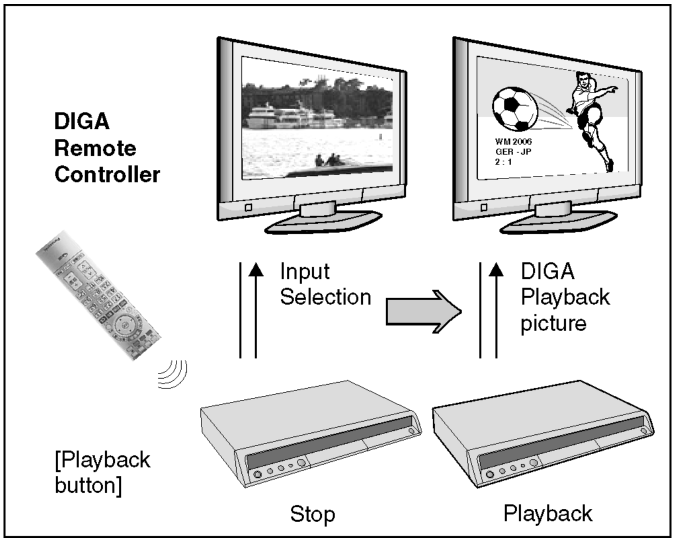
At starting of playback / GUI (Graphical User Interface) display by DIGA, it turn on power of VIErA, and it displays picture of DIGA onto screen of VIErA.

a. Starting of playback:

It includes automatic playback of DVD-Video and so on. And it includes picture of screen saver too.

b. GUI display:

FUNCTIONS, DIRECT NAVIGATOR, TV PROGRAM, PROG/CHECK, Timer Recording, G-code, Initial setting, Playback setting, Play list, SD/DVD guide, Warning messages that user can select and so on.



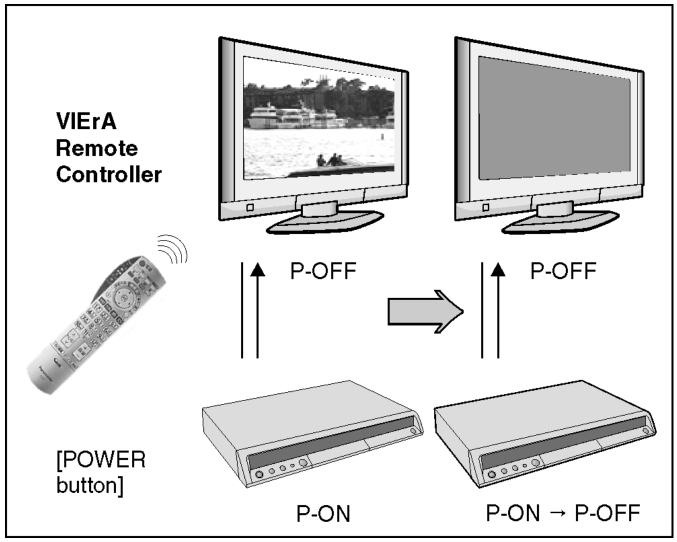
2. Power Link

Power of DIGA is turned off linking to POWER OFF of VIErA.

- Power not turned on linking to POWER ON of VIErA.
- It is limited in following cases that DIGA links to POWER OFF of VIErA.
- During EE display (While Timer recording is being executed/Functions is being displayed are included.)

However except cases below.

- During EE display, but manual recording is being executing/during EXT_Link recording.
- During Tray is being opened.
- Case that DIGA is in status that power cannot turn off (during dubbing, during finalize).



6 LOCATION OF CONTROLS AND COMPONENTS

Remote Control

DVD Stand-by/on switch
Press to switch the unit from on to stand-by mode or vice versa. In stand-by mode, the unit is still consuming a small amount of power.
Switching this unit into standby mode does not disconnect it from the mains.

DRIVE SELECT Select the HDD, DVD or SD drive.

Direction buttons in the menu guide.
Select groups or titles.
ENTER: Select or save a setting.
◀II II▶ Still picture or slow motion playback.

i Display the programme information from the TV GUIDE or the Banner.

PROG/CHECK Check / Change a Timer recording.

SUB MENU Launch sub menus.

RETURN Return to the previous menu.

VIDEO Plus+ VIDEO Plus+ menu (EB-model) or ShowView menu (EG/EC-models) for analogue stations

SLOW/SEARCH Search or slow motion playback.

STOP Stops recording, replay or forward / reverse action

PAUSE Pause a recording or playback.

REC Start the recording.

REC MODE Record mode button XP, SP, LP, EP

EXT LINK Record with external recording control.

DIRECT TV REC Direct TV recording.

AUDIO Selectiong Audio channel / Soundtrack.

F REC Flexible recording.

DISPLAY Show on screen menu.

TV
Turn the television set on and off.
AV Select the AV input on the television set.
CH: Select the channel on the television set.
VOLUME: Volume control of the television set.

PAGE / CH
CH: Select the channel on the Recorder.
PAGE: Scroll in the electronic TV Guide.

Number buttons - direct input

VCD	5: 0 5	15: 1 5
JPEG MP3	5: 0 0 5	15: 0 1 5
JPEG	5: 0 0 0 5	15: 0 0 1 5

GUIDE GUIDE: Launch the TV Guide menu.

DIRECT NAVIGATOR: title view
TOP MENU: Main menu of DVD-video.

FUNCTIONS FUNCTION selection menu.

∗ Cancel a function.

INPUT SELECT Switch button of the AV input between AV1, AV2 AV3 (front), AV4 and DV in.

DELETE Delete items.

PLAY/x1.3 Starts playback.
RAM - You can increase the playback speed
Hold PLAY during playback.

SKIP Skip chapters, titles, or pictures.

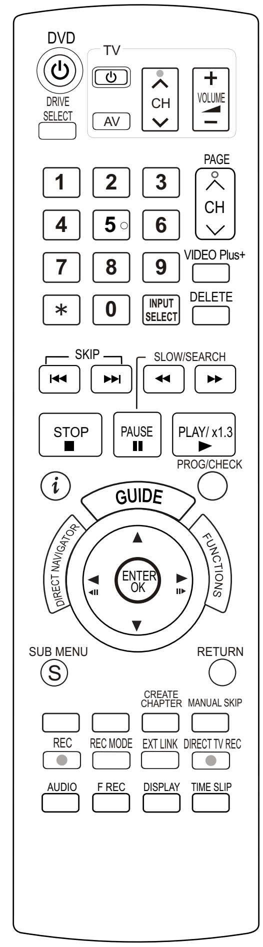
Menu guide (red button): Profile, Guide, Digital Text, Manual Tuning

Menu guide (green button): Profile, Guide, Digital Text

CREATE CHAPTER
Menu guide (yellow button): Profile, Guide, Digital Text
CREATE CHAPTER: Deviding a recording into chapters.

MANUAL SKIP
Menu guide (blue button): Profile, Guide, Digital Text
MANUAL SKIP: Jump forwards 30 seconds.

TIME SLIP Select the time frame.



7 OPERATING INSTRUCTIONS

7.1. TAKING OUT THE DISC FROM DVD-DRIVE UNIT WHEN THE DISC CANNOT BE EJECTED BY OPEN/CLOSE BUTTON

7.1.1. FORCIBLE DISC EJECT

7.1.1.1. WHEN THE POWER CAN BE TURNED OFF

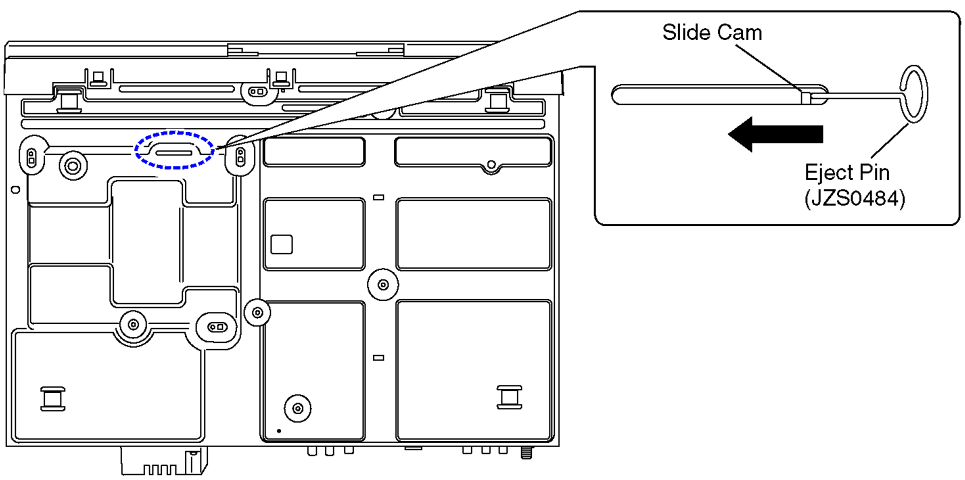
1. Turn off the power and press [STOP], [CH UP] keys on the front panel simultaneously for 5 seconds.

7.1.1.2. WHEN THE POWER CAN NOT BE TURNED OFF

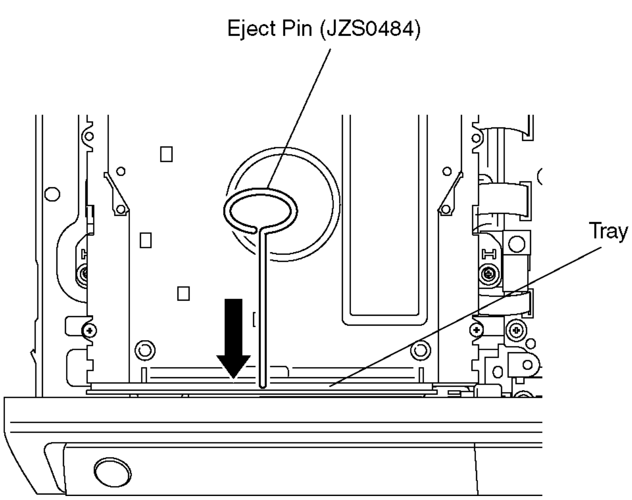
1. Press [POWER] key on the front panel for over 10 seconds to turn off the power forcibly and press [STOP] [CH UP] keys on the front panel simultaneously for 5 seconds.

7.1.2. WHEN THE FORCIBLE DISC EJECT CAN NOT BE DONE

1. Turn off the power and pull out AC cord.
2. Remove the Top Case.
3. Put deck so that bottom can be seen.
4. Push SLIDE CAM by Eject Pin (JZS0484) or minus screw driver (small) in the direction of arrow to eject tray slightly.



5. Put deck upward and push out Tray by Eject Pin (JZS0484) or minus screw driver (small).



8 SERVICE MODE

8.1. SELF-DIAGNOSIS AND SPECIAL MODE SETTING

8.1.1. SELF-DIAGNOSIS FUNCTIONS

Self-Diagnosis Function provides information for errors to service personnel by “Self-Diagnosis Display” when any error has occurred.

U, H** and F** are stored in memory and held.**

You can check latest error code by transmitting [0] [1] of Remote Controller in Service Mode.

Automatic Display on FL will be cancelled when the power is turned off or AC input is turned off during self-diagnosis display is ON.

Error Code	Diagnosis contents	Description	Monitor Display	Automatic FL display
IR ERR	IR communication error	[IR ERR] is displayed when communication between Timer microprocessor and IR microprocessor fails.	No display	IR ERR
No REC	Recording is impossible	[No REC] is displayed when recording is impossible due to the defect, dirt or wound of media.	No display	NOREC
U30	Remote control code error	Display appears when main unit and remote controller codes are not matched.	No display	DVD * “*” is remote controller code of the main unit. Display for 5 seconds.
U59	Abnormal inner temperature detected	Display appears when the drive temperature exceeds 70°C. The power is turned off forcibly. For 30 minutes after this, all key entries are disabled. (Fan motor operates at the highest speed for the first 5 minutes. For the remaining 25 minutes, fan motor is also stopped.) The event is saved in memory as well.	No display	U59 “U59 is displayed for 30 minutes.
U61	The unit is carrying out its recovery process (with no disc in the disc tray).	* The unit detected an error while recording or playing with **with no disc in the disc tray.** The unit is carrying out its recovery process. This process restores the unit to normal operation. The unit is not broken. Wait until the message disappears.	No display	U61
U80	ST Microprocessor Communication Error on Timer Bus	Displayed appears when ST Microprocessor Communication Error on Timer Bus occurs.	No display	U80 “U80” is displayed till Power Key is pressed.
U81	ST Microprocessor Communication Error on UART	Displayed appears when ST Microprocessor Communication Error on UART occurs.	No display	U81 “U81” is displayed till Power Key is pressed.
U88	The unit is carrying out its recovery process (with no disc in the disc tray).	* The unit detected an error while recording or playing with **with no disc in the disc tray.** The unit is carrying out its recovery process. This process restores the unit to normal operation. The unit is not broken. Wait until the message disappears.	No display	U88
U99	Hang-up	Displayed when communication error has occurred between Main microprocessor and Timer microprocessor.	No display	U99 Displayed is left until the [POWER] key is pressed.
H19	Inoperative fan motor	When inoperative fan motor is detected after powered on, the power is turned off automatically. The event is saved in memory.	No display	No display

Error Code	Diagnosis contents	Description	Monitor Display	Automatic FL display
F00	No error information	Initial setting for error code in memory (Error code Initialization is possible with error code initialization and main unit initialization.)	No display	No display
F58	Drive hardware error	When drive unit error is detected, the event is saved in memory.	No display	No display
F34	Initialization error when main microprocessor is started up for program recording	When initialization error is detected after starting up main microprocessor for program recording, the power is turned off automatically. The event is saved in memory.	No display	No display
UN-SUPPORT	Unsupported disc error	*An unsupported format disc was played, although the drive starts normally. *The data format is not supported, although the media type is supported. *Exceptionally in case of the disc is dirty.	**“This disc is incompatible.”**	UNSUP ↓ PORT Display for 5 seconds.
NO READ	Disc read error	*A disc is flawed or dirty. *A poor quality failed to start. *The track information could not be read.	**“Cannot read. Please check the disc.”**	NOREAD
HARD ERR	Drive error	The drive detected a hard error.	“**DVD drive** error.”	Display for 5 seconds. HARD ↓ ERR
SELF CHECK	Restoration operation	Since the power cord fell out during a power failure or operation, it is under restoration operation. *It will OK, if a display disappears automatically. If a display does not disappear, there is the possibility that defective Digital P.C.B. / RAM drive.	No display	SELF ↓ CHECK
PLEASE WAIT	Unit is in termination process	Unit is in termination process now. “BYE” is displayed and power will be turned off. In case “Quick Start” of setup menu is ON, it is displayed in restoration operation for AC off.	No display	PLEASE ↓ WAIT
UN-FORMAT	Unformatted disc error	You have inserted an unformatted DVD-RAM or DVD-RW that is unformatted or recorded on other equipment.	**Format:** This disc is not formatted properly. Format the disc in DISK MANAGEMENT?	UNFOR ↓ MAT

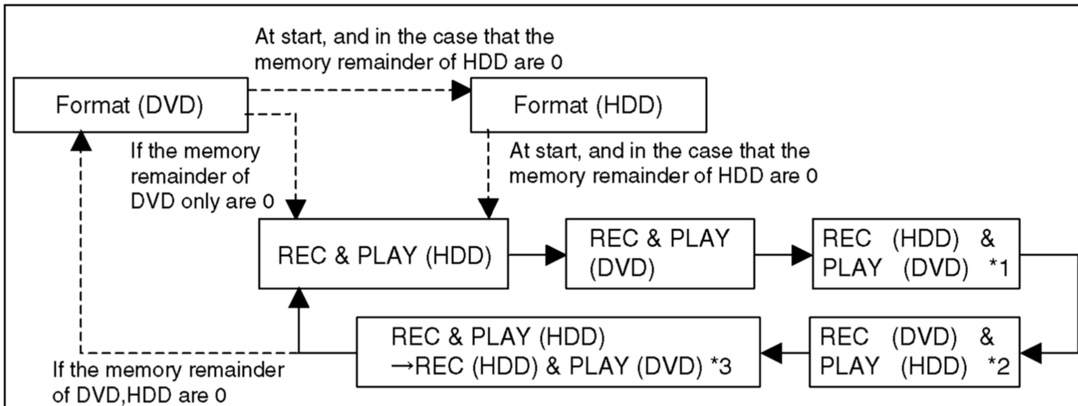
Error Code	Diagnosis contents	Description	Monitor Display	Automatic FL display
HDD ERR	[HDD ERR] is displayed when start up of HDD was failed. (Except error of setting of Power on Stand-by)	1. When normal start up was failed 2. When start up at HDD boot was failed 3. When start up from state of P-OFF was failed 4. When start up from state of HDD SLEEP was failed. [HDDERR] is displayed when above each start up of HDD was failed. * In case 1.), tray opens automatically and [HDDERR] is displayed until version up disc is inserted.	No display	HDDERR
HDD NG	Power on Stand-by setting error	[HDD NG] is displayed when power on Stand-by setting of HDD is NG or when HDD which power on Stand-by is not set to is used. Please try to replace HDD with junine HDD as service parts.	No display	HDD NG

8.1.2. SPECIAL MODES SETTING

Item		FL display	Key operation
Mode name	Description		Front Key
TEST Mode	*All the main unit's parameters (include tuner) are initialized.	TM AV1	Press [STOP], [CH UP] and [OPEN/CLOSE] keys simultaneously for five seconds when power is off.
Rating password	The audiovisual level setting password is initialized to “Level 8”.	INIT	Open the tray, and press [REC] and [PLAY] simultaneously for 5 seconds.
Service Mode	Setting every kind of modes for servicing. *Details are described in “**Service Mode**”.	SERV	When the power is off, press [CH UP], [OPEN/CLOSE] and [REC] keys simultaneously for 5 seconds.
Forced disc eject	Removing a disc that cannot be ejected. The tray will open and unit will shift to P-off mode. *When Timer REC is ON or EXT-LINK is ON, execute " Forced disc eject " after releasing Timer REC or EXT-LINK. *This command is not effective during "Child lock" is ON. While Demonstration Lock is being set, this Forced disc eject function is not accepted. **If this command was executed while TIMER REC is being set, TIMER REC setting will be kept.**	The display before execution leaves. ******	When the power is off, press [STOP] and [CH UP] keys simultaneously for 5 seconds.
Child lock/unlock	Set or release “Child Lock”.	X HOLD	Press [ENTER] and [RETURN] by remote controller simultaneously until [X-HOLD] is displayed.
NTSC/PAL system select	To switch PAL/NTSC altemately.	The display before execution leaves. ******	While the power is on (E-E mode), press [STOP] and [OPEN/CLOSE] simultaneously for 5 seconds.
Forced power-off	When the power button is not effective while power is ON, turn off the power forcibly. *When Timer REC is ON or EXT-LINK is ON, execute “Forced Power-off” after releasing Timer REC or EXT-LINK.	Display in P-off mode.	Press [Power] key over than 10 seconds.

Item: Mode name	Item: Description	FL display	Key operation: Front Key
Aging	Perform sequence of modes as * Aging Description shown below continually. **Caution:** **All programs in DVD-RAM disc will be deleted because Formatting is done once in Aging process.**	Display following the then mode.	When the power is ON, press [STOP], [POWER] and [OPEN/CLOSE] simultaneously for over 5 seconds and less than 10 seconds. **NOTE1:** If Unit has not turned into Aging mode by operations shown above, execute TEST MODE once and re-execute operation shown above. (*All the main unit's parameters include tuner are initialized by TEST mode.) **NOTE2:** If the unit has hung-up because of pressing keys for over 10 seconds, once turn off the power, and re-execute this command. *When releasing Aging mode, press [POWER] key.

Aging Contents (Example):



*1 : REC (HDD) & PLAY (DVD) content of operation
HDD→REC, DVD→PLAY, CUE, REV, PLAY, PAUSE, SLOW, R-SLOW, PLAY, PROGRAM NAVI
*2 : REC (DVD) & PLAY (HDD) content of operation
DVD→REC, HDD→PLAY, CUE, REV, PLAY, PAUSE, SLOW, R-SLOW, PLAY, PROGRAM NAVI, TRAY OPEN/CLOSE
*3 : REC & PLAY (HDD)→REC (HDD) & PLAY (DVD) content of operation
HDD→REC & PLAY, DVD→PLAY, TRAY OPEN/CLOSE

Mode name	Description	FL display	Front Key
Demonstration lock/unlock	Ejection of the disc is prohibited. The lock setting is effective until unlocking the tray and not released by "Main unit initialization" of service mode.	*When lock the tray. LOCK "LOCK" is displayed for 3 seconds.	When the power is on, press [STOP] and [POWER] keys simultaneously for 5 seconds.
		*When unlock the tray. UNLOCK "UNLOCK" is displayed for 3 seconds.	When the power is on, press [STOP] and [POWER] keys simultaneously for 5 seconds.
		*When press OPEN/CLOSE key while the tray being locked. LOCK Display "LOCK" for 3 seconds.	Press [OPEN/CLOSE] key while the tray being locked.

Item		FL display	Key operation
Mode name	Description		Front Key
ATP re-execution	Re-execute ATP.	Display at ATP executing. ******	When the power is on (E-E mode), press [CH UP] and [CH DOWN] simultaneously for 5 seconds.
Progressive initialization	The progressive setting is initialized to Interlace.	The display before execution leaves. ******	When the power is on (E-E mode), press [STOP] and [PLAY] simultaneously for 5 seconds.

8.1.3. SERVICE MODES AT A GLANCE

Service mode setting: While the power is off, press [REC], [CH UP] and [OPEN/CLOSE] simultaneously for five seconds.

Item		FL display	Key operation
Mode name	Description		(Remote controller key)
Release Items	Item of Service Mode executing is cancelled.	SERV	Press [0] [0] or [Return] in service mode.
Error Code Display	Last Error Code of U/H/F held by Timer is displayed on FL. *Details are described in **“Self-Diagnosis Functions”.**	♣□□ * ♣ shows U/H/F □□ shows number If any error history dose not exist, [F00] is displayed.	Press [0] [1] in service mode
ROM Version Display	1. Region code (displayed for 5 sec.) 2. Main firm version (displayed for 5 sec.) 3. Timer firm version (displayed for 5 sec.) 4. Drive firm version (displayed for 5 sec.) 5. ROM correction version (left displayed)	1. NO ** 2. ****** 3. ****** 4. **** 5. *** ‘ ’ are version displays.	Press [0] [2] in service mode
White Picture Output	White picture is output as component Output from AV Decoder. *White picture (Saturation rate : 100%) *It is enable to switch Interlace/Progressive by “I/P switch: [1] [4]”	*Initial mode is “Interlace”. WHIT I	Press [1] [1] in service mode.
		Switch Interlace/Progressive WHIT	Press [1] [4] in White Picture Output mode. *I/P are switched alternately.

Item		FL display	Key operation
Mode name	Description		(Remote controller key)
Magenta Picture Output	Magenta picture is output with Component Output from AV Decoder. *Magenta picture (Saturation rate: 100%) *It is enable to switch Interlace/Progressive by "I/P switch: [1] [4]"	*Initial mode is "Interlace". MAGE I	Press [1] [2] in service mode.
		Switch Interlace/Progressive MAGE	Press [1] [4] in Magenta Picture Output mode. *I/P are switched alternately.
RTSC Return in XP (A & V)	AV1 input signal is encoded (XP), decoded (XP) and output decoded signal to external without DISC recording and DISC playback.	Initial mode: EE2/ Interlace/ XP/ Audio 48kHz EE2	Press [1] [3] in service mode.
		Switch Interlace/Progressive EE2P48	Press [1] [4] in RTSC Return XP mode. *I/P are switched alternately.
		Audio 44.1 kHz/ 48 kHz Switch EE2P44	Press [2] [4] in RTSC Return XP mode. *48 kHz / 44.1 kHz are switched alternately.
I/P Switch	Switch Interlace and Progressive in EE mode. *Initial setting is "Interlace". *This command is effective during executing "White Picture Output", "Magenta Picture Output" and "RTSC Return in XP (A & V)" modes.	Initial mode is Interlace SERV P Switch Interlace/Progressive SERV I	Press [1] [4] in I/P Switch mode. *I/P are switched alternately.
Audio Mute (XTMUTE)	Check whether mute is applied normally by the timer microprocessor.	T MUTE	Press [2] [1] in service mode.
Audio Mute (XDMUTE)	Check whether mute is applied normally by the Digital P.C.B..	D MUTE	Press [2] [2] in service mode.
Audio Pattern Output	The audio pattern stored in the internal memory is output (Lch: 1kHz/-18dB) (Rch: 400Hz/-18dB) *Audio sound clock switching operation of DAC can be confirmed by sub command [2] [4].	Initial mode (Audio 48kHz) AU 48	Press [2] [3] in service mode.
		Audio 44.1kHz/48kHz switching AU 44	Press [2] [4] in Audio Pattern Output mode. *48 kHz / 44.1 kHz are switched alternately.

Item		FL display	Key operation
Mode name	Description		(Remote controller key)
HDD READ inspection	Perform a complete read inspection of the HDD.	When the HDD is OK HDD OK If the HDD is defective HDD□○○ □ : Judge of Forward rate. * When normal (Forward rate is 35 Mbps or more and there is no HDD error): □ is Space. * When Abnormal (Forward rate is less than 35 Mbps or HDD error existing): □ is X. ○○ : Number of what have spent time for seeking is over 100ms. * When normal: ○○ are spaces. * When Abnormal: Display Number of what have spent time fore seeking over 100 ms. However, if the number is more than 100, display [XX]. We judge it is normal that the number is less than 4.	Press [3] [1] in the service mode. * When canceling the checking mode while executing, do “forced power-off”. Method: Press the “POWER” button more than 10 seconds.
Laser Used Time Indiction	Check laser used time (hours) of drive.	* ●(*****) is the used time display in hour. ●Laser used time of DVD/ CD in Playback/Recording mode is counted.	Press [4] [1] in service mode.
Delete the Laser Used Time	Laser used time stored in the memory of the unit is deleted.	CLR	Press [9] [5] in service mode.

Item		FL display	Key operation
Mode name	Description		(Remote controller key)
RAM Drive Last Error	RAM Drive error code display. *For details about the drive error code, refer to the Service Manual for the specific RAM Drive.	1. Error Number is displayed for 5 seconds. [NO **] 2. Time when the error has occurred is displayed for 5 seconds. [DDHHMM] DD: Day hh: Hour mm: Minute 3. Last Drive Error (1/2) is displayed for 5 seconds. [******] 4. Last Drive Error (2/2) is displayed for 5 seconds. [******] 5. Error occurring Disc type is displayed for 5 seconds. [******] 6. Disc Maker ID is displayed for 5 seconds. [******] 7. Factor of Drive Error occurring is left displayed	Press [4] [2] in service mode. When “INFO******” is being displayed, past 19 error histories can be displayed by pressing [0] [1] - [1] [9] In case that the maker cannot be identified, display is black out.
Delete the Last Drive Error	Delete the Last Drive Error information stored on the DVD RAM-Drive.	[CLR]	Press [9] [6] in service mode.
Laser power confirmation	Drive state is judged based on difference between laser power value at shipping and present laser power value.	[CHK *] * is judgment result * / Power value difference / Evaluation 0 / 1mW or less / Very good 1 / 2mW or less / Good 2 / 3mW or less / Bad 3 / 4mW or more / Very bad If DVD-RAM disc in not inserted, [NO DISC] is displayed. If power value study was filed, [ERROR] is displayed.	1. **Insert DVD-RAM disc** into RAM Drive in service mode. (Other media are assumed to be non-correspondence.) 2. Press [4] [4].
Turn on all FL/LEDs	All segments of FL and all LEDs are turned on.	All segments are turned on.	Press [5] [1] in service mode.
PB HIGH Signal Output	8 pin of AV 1 Jack (PB HIGH terminal) is High (approx. 11V DC).	[PB HI]	Press [5] [2] in service mode.
PB MIDDLE Signal Output	8 pin of AV 1 Jack (PB HIGH terminal) is Middle (approx. 5.5V DC)	[PB MID]	Press [5] [3] in service mode.

Item		FL display	Key operation
Mode name	Description		(Remote controller key)
Front connection inspection	Press all front keys and check the connection between Main P.C.B. and Front key Switches.	OT ** (1) (2) (1) Each time a key is pressed, segment turned on increases one by one. (2) Total umber of keys that have been pressed.	Press [5] [4] in service mode.
Production Date Display	Display the date when the unit was produced.	YYMMDD YY: Year MM: Month DD: Day	Press [6] [1] in service mode.
Display the accumlated working time	Display the accumulated unit's working time.	****** (Indicating unit: Second)	Press [6] [4] in service mode.
Display the Error History	Display the Error History stored on the unit.	Display reason of error for 5 seconds. NO ** 01: Defect of Digital P.C.B. (AV DEC / MAIN CPU) 02: Defect of RAM Drive. 03: Defect of Disc. 04: Defect of Digital P.C.B. or Communication Error. 05: Defect of Digital P.C.B. (AV DEC / MAIN CPU) 06: Defect of HDD. Display the time when the error has occurred for 5 seconds. DDHHMM DD: Day hh: Hour mm: Minute Accumulated working time till occuring of the error is left displayed. ****** (Indicating unit: Second)	Press [6] [5] in service mode. Then press [0] [1] ~ [1] [9], the past 19 error histories are displayed.
Delete the Error History	Delete Error History information stored on the unit.	CLR	Press [9] [7] in service mode.

Item		FL display	Key operation
Mode name	Description		(Remote controller key)
SD card WRITE check	Check SD card WRITE function with SD slot.	When the WRITE check is OK. SD OK When the WRITE check is NG. SD NG ***Note:** The image stored in the SD card will be erased.	Insert a SC card to SD card slot, and press [7] [4] in service mode. * Insert SD card while the power is off. * Check for [CARD SD] display on the FL display and go on the procedure.
AV4(V)/AV1(RGB) I/O Setting	Set input to AV4 (V) and set output to AV1 (RGB) for I/O checking	PAL 01	Press [8] [0] in service mode.
AV2(Y/C)/AV1(V) I/O Setting	Set input to AV2 (Y/C) and set output to AV1 (V) for I/O checking	PAL 02	Press [8] [1] in service mode.
AV2(V)/AV1(Y/C) I/O Setting	Set input to AV2 (V) and set output to AV1 (Y/C) for I/O checking	PAL 03	Press [8] [2] in service mode.
AV2(RGB)/AV1(V) I/O Setting	Set input to AV2 (RGB) and set output to AV1 (V) for I/O checking	PAL 04	Press [8] [3] in service mode.
P50(H) Output	Timer Microprocessor IC7501-76 output High signal for AV1-pin 10 passing through inverter (approx. 0V DC at AV1-pin 10).	When OK. P50HOK When NG. P50HNG	Press [8] [4] in service mode.
P50(L) Output	Timer Microprocessor IC7501-76 output Low signal for AV1-pin 10 passing through inverter (approx. 4.4V DC at AV1-pin 10).	When OK. P50LOK When NG. P50LNG	Press [8] [5] in service mode.
Tray OPEN/CLOSE Test	The RAM drive tray is opened and closed repeatedly.	****** "*" is number of open/close cycle times.	Press [9] [1] in service mode *When releasing this mode, press the [POWER] button of Remote Controller more than 10 seconds.
Error code initialization	Initialization of the last error code held by timer (Write in F00)	CLR	Press [9] [8] in service mode.
Initialize Service	Last Drive Error, Error history and Error Codes stored on the unit are initialized to factory setting.	CLR	Press [9] [9] in service mode.
Finishing service mode	Release Service Mode.	Display in STOP (E-E) mode. ******	Press power button on the front panel or Remote controller in service mode.

9 SERVICE FIXTURE AND TOOLS

Part Number	Description	Compatibility
RFKZ0260	Extension Cable (Main P.C.B. - RAM/Digital P.C.B. / 88 Pin)	Same as EH50 Series
RFKZ0216	Extension Cable (Main P.C.B. - Power P.C.B. / 23 Pin)	Same as E55 Series
RFKZ0366 (2x)	Extension FFC (HDMI P.C.B. and HDD - RAM/Digital P.C.B. / 40 Pin / 500 mm)	Same as EH55 / EH56 Series
RFKZ0168	Extension Cable (Power P.C.B. - Fan Motor / 3 Pin)	Same as E50 / E55 Series
RFKZ0339	Extension Cable (Main P.C.B. - HDD / 4 Pin)	Same as EH55 / EH56 Series
JZS0484	Eject Pin	Same as ES15
RFKZ03D01K	Lead Free Solder (0.3 mm / 100 g Reel)	Same as ES15
RFKZ06D01K	Lead Free Solder (O.6 mm / 100 g Reel)	Same as ES15
RFKZ010D01	Lead Free Solder (1.0 mm / 100 g Reel)	Same as ES15
RFKZ0316	Solder Remover (Lead free 10 W temperature Solder / 180 g)	Same as ES15
RFKZ0328	Flux	Same as ES15
RFKZ0329	Bottle of Flux	Same as ES15

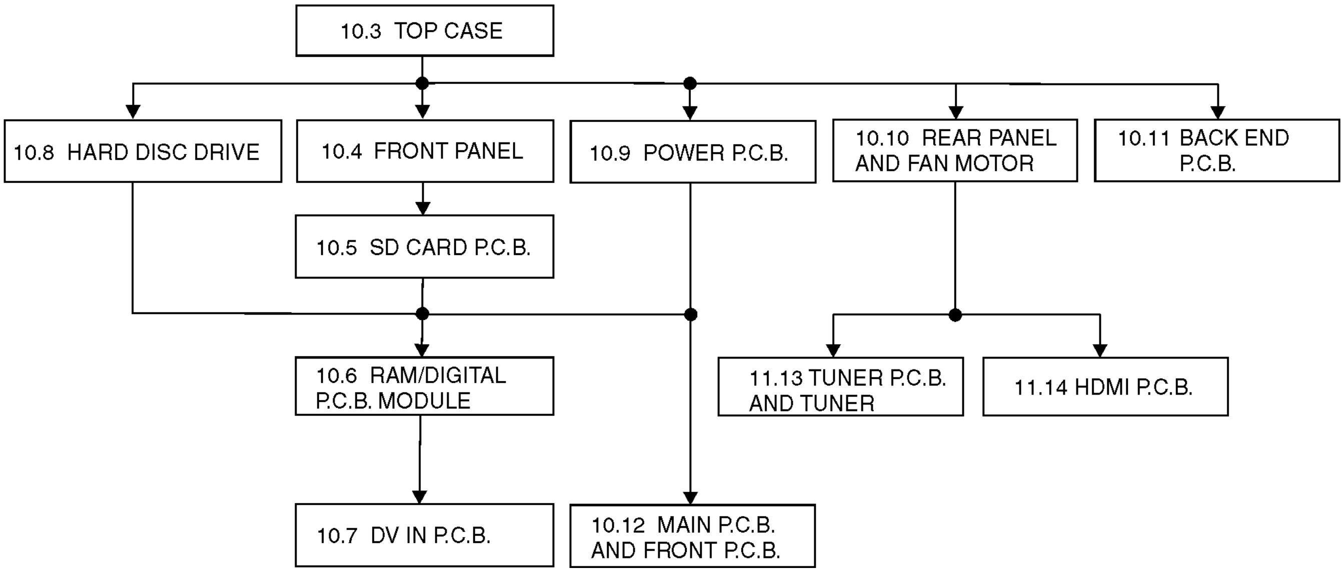
10 ASSEMBLING AND DISASSEMBLING

Caution: Oringal screws shoul be used.

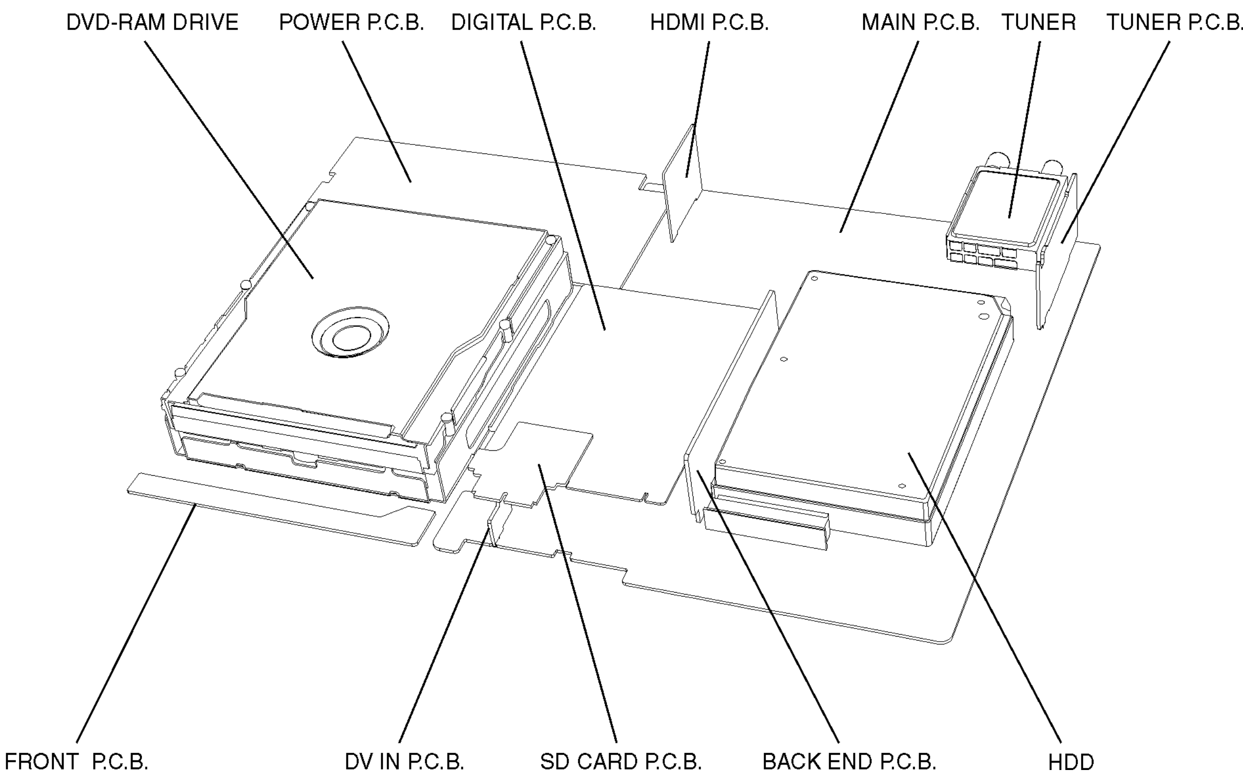
10.1. DISASSEMBLY FLOW CHART

This chart is the procedure for disassembling the casing and inside parts for internal inspection when carrying out the servicing.

To assemble the unit, reverse the steps shown in the chart below.

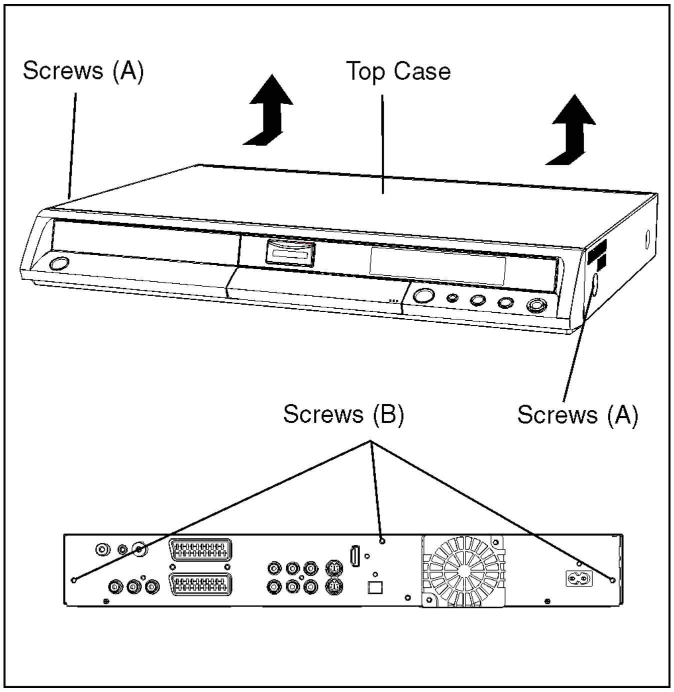


10.2. P.C.B. POSITIONS



10.3. TOP CASE

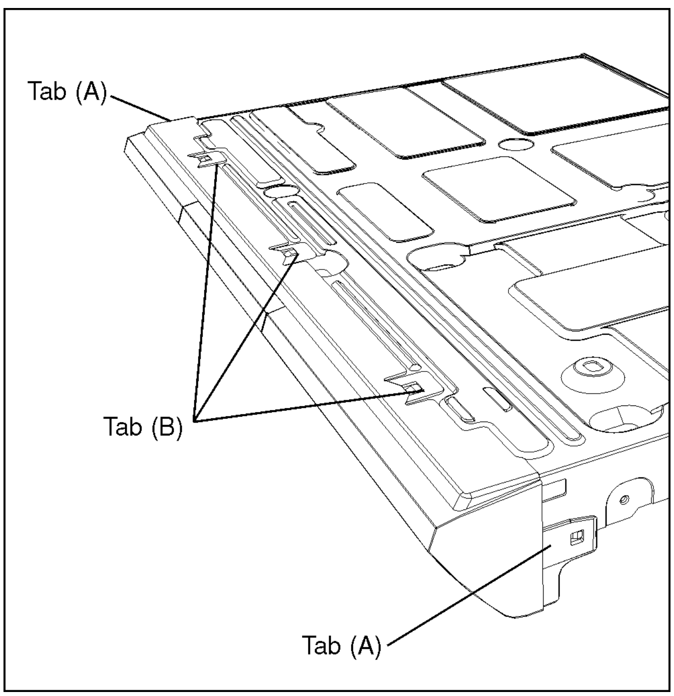
1. Remove the 2 screws (A) and 3 screws (B).
2. Slide Top Case rearward and open the both ends at rear side of the Top Case a little and lift the Top Case in the direction of the arrows.



10.4. FRONT PANEL

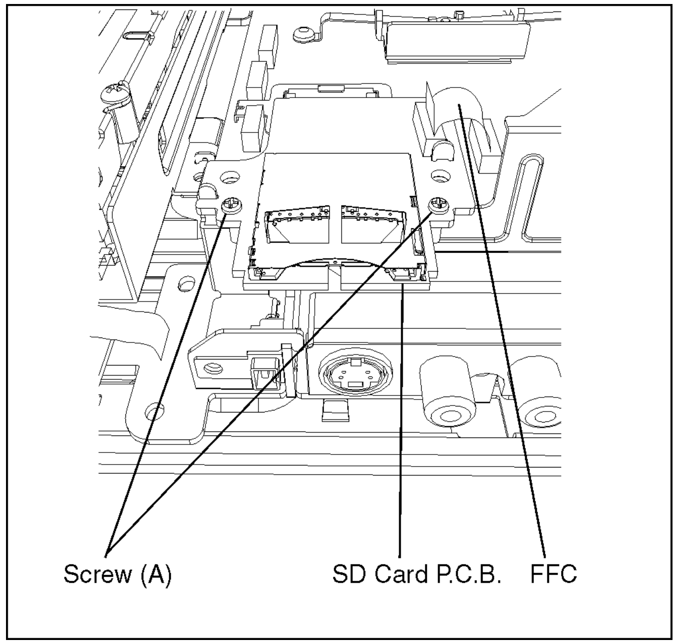
1. Unlock 2 tabs (A) and 3 tabs (B) in this order to remove Front Panel.

   The tab (A) and (B) should be unlocked at the same time, respectively.



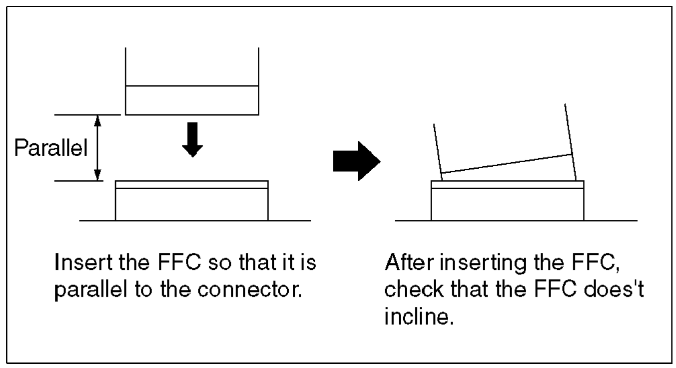
10.5. SD CARD P.C.B.

1. Release FFC
2. Remove 2 Screws (A) to remove SD Card P.C.B. .



Caution:

When replacing SD Card P.C.B., pay attention as below.



10.6. RAM/DIGITAL P.C.B. MODULE

Caution:

Pairing of RAM Drive and Digital P.C.B. as “RAM / Digital P.C.B. Module” have to be replaced together. If the pairing is changed, RAM Drive unit has to be re-aligned. Because the alignment data for RAM Drive Unit is stored in Digital P.C.B.

Note:

When replacing the Digital P.C.B., “UNFORMAT” indication is displayed and HDD must be formatted.

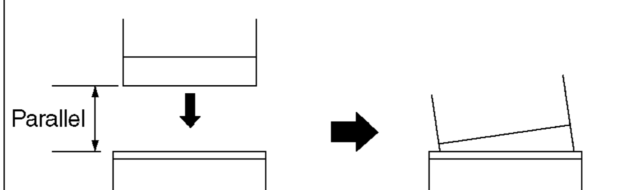
After that **all programme in the HDD will be lost.**

How to format the HDD.

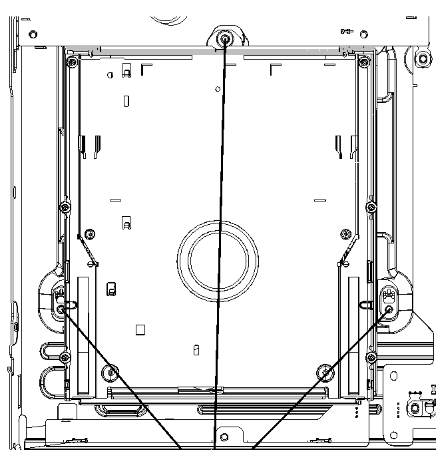
- After “UNFORMAT” is is displayed on the FL display, warning message for HDD format is appeared on the TV screen.
- Select “YES” and press “ENTER” button on the remote control; the HDD will be formatted automatically.
- After that all programme in the HDD will be lost.

Caution:

When replacing Digital P.C.B., pay attention as below.

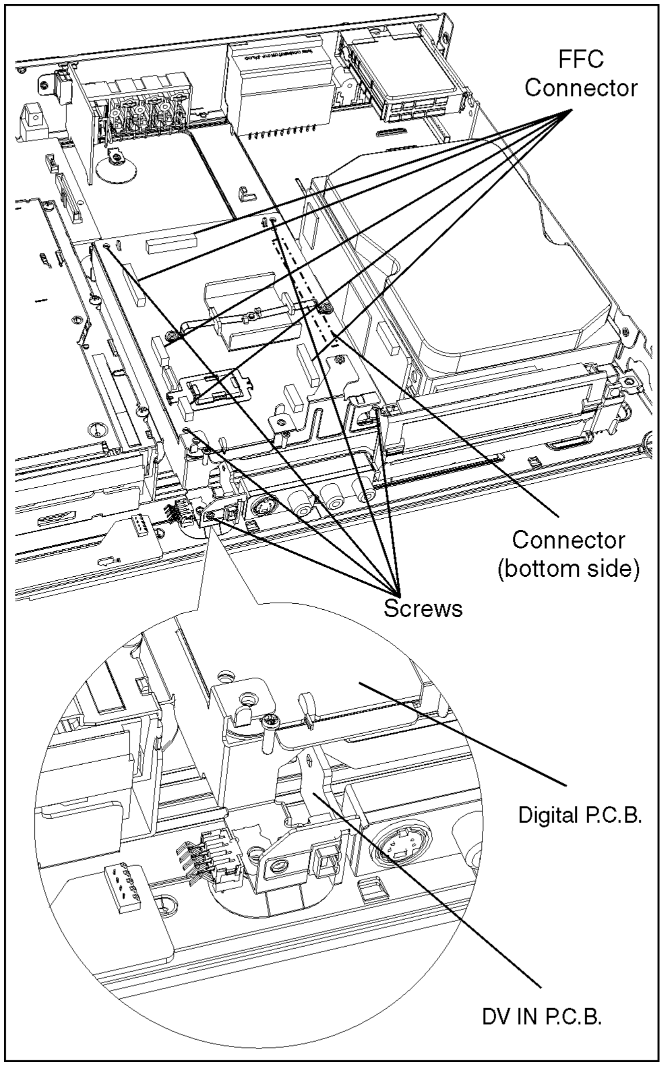


1. Remove 3 Screws on DVD-RAM Drive.

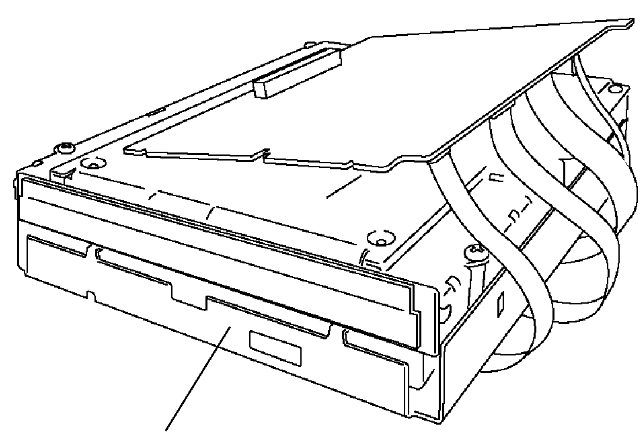


2. Remove 2 FFCs and 4 Screws.
3. Lift up Digital P.C.B. slightly to disconnect Main P.C.B. Connector and DV IN P.C.B. Connector

   on the bottom side.

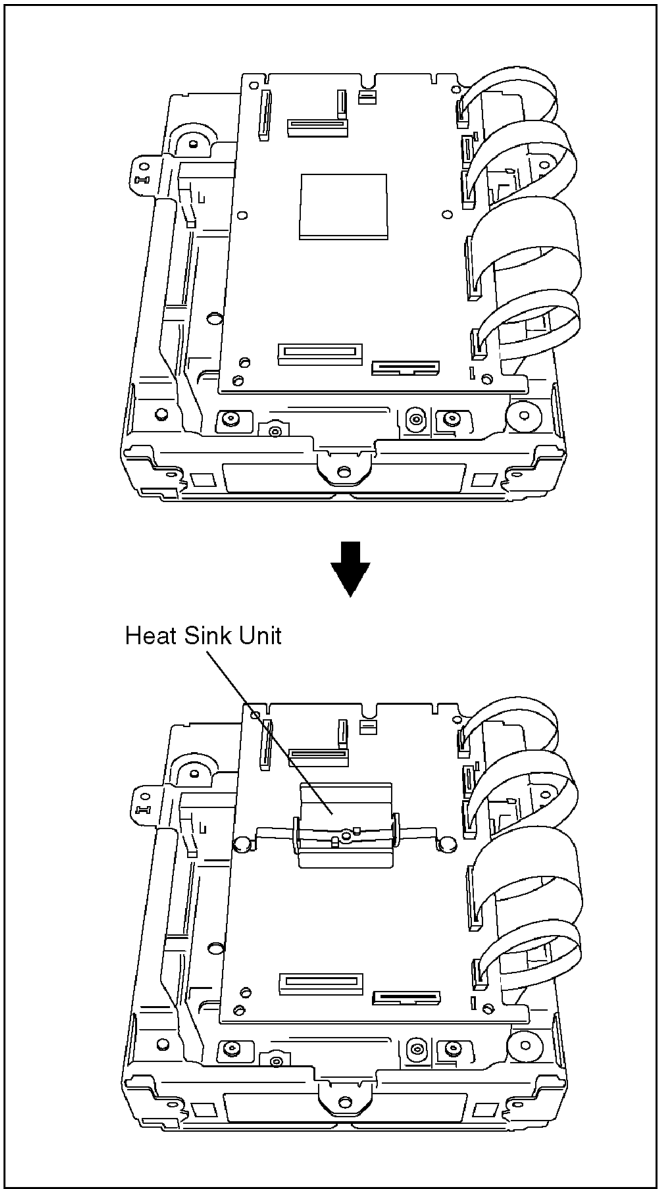


4. Put Digital P.C.B. on DVD-RAM Drive and remove RAM/Digital P.C.B. Module.



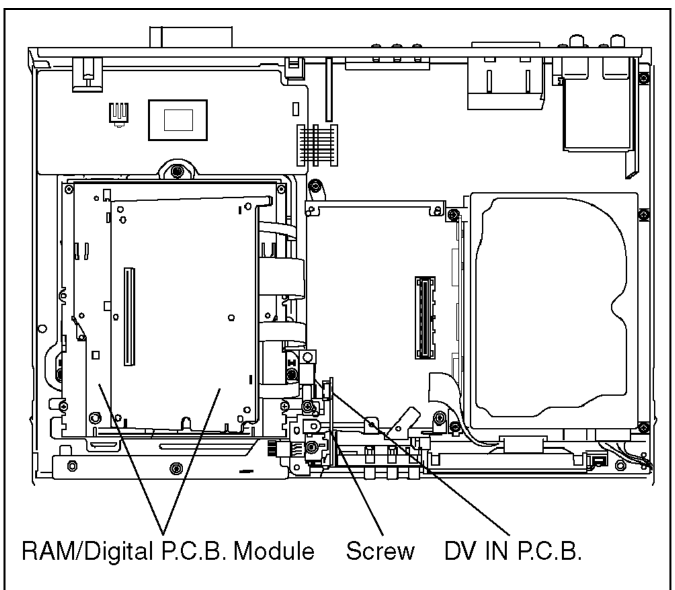
Note:

RAM/Digital P.C.B. Module as service part has no heat sink unit. Before returning to customer, heat sink unit should be installed on to Digital P.C.B.



10.7. DV IN P.C.B.

1. Remove 1 Screw to remove DV IN P.C.B.



10.8. HARD DISC DRIVE

Caution:

Writing the main firmware to the unit is necessary after replacing the HDD. Prepare the latest firmware updating disc.

* The main firmware is recorded in the HDD, but the replacement HDD has no data (and needs to be formatted).

Writing Procedure of Main Firm:

- Writing of Main Firm needs 3, 4 minutes.
- Never cut the power of DVD Recorder until writing in Firmware ends.
- Initial settings and contents of reservation will not change if writing is normally completed.

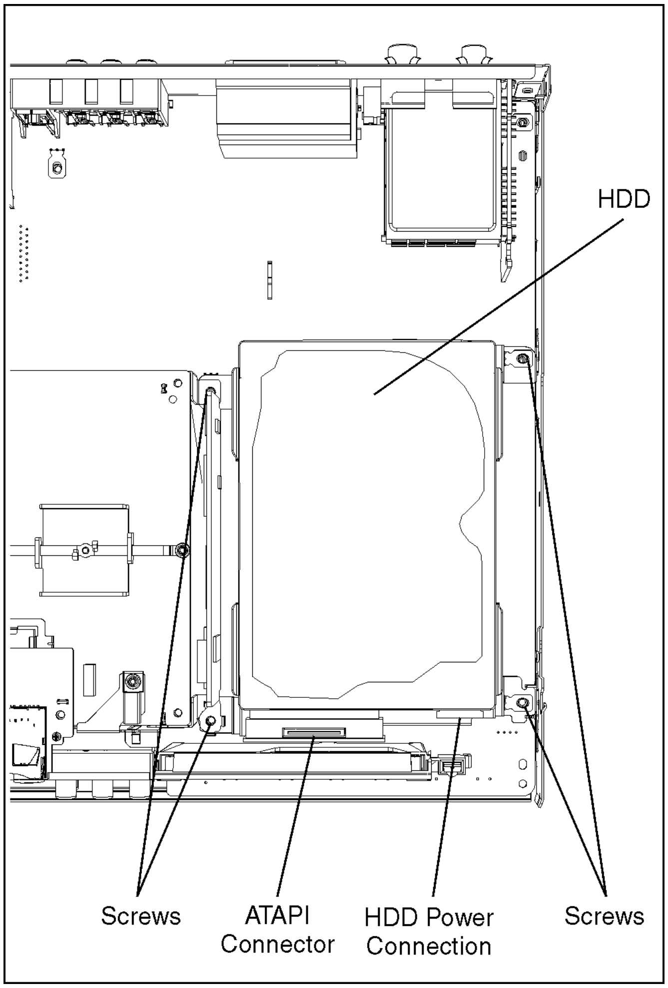
1. Prepare latest firmware updating disc
2. Replace HDD
3. Turn on power of DVD Recorder
4. After [PLEASE WAIT] is displayed on FL., [HDD ERR] is displayed on FL
5. Tray opens automatically
6. Insert updating disc for Firmware and press OPEN / CLOSE key
   (If a wrong disc was insered, [NG DISK] [NO FVU] is displayed on FL.)
7. [LOAD] → [LD FVU] ←→ [M_FIRM] are displayed on FL alternately
8. [MAIN] ←→ [UPD OK] blink alternately and Tray opens. Take out disc (Writing was finished)
9. Press Power button to turn off power
10. Press Power button to turn on power
11. [HELLO] → [SELF CHECK] are displayed on FL
12. [UNFORMATED] is displayed on FL
13. After [UNFORMAT] was displayed, message to request FORMAT is displayed on TV screen
14. Select [Yes] and press [ENTER] key to format HDD
   (After FORMAT, program in HDD will be lost, but Main firm will not be lost
   "Write of the main farm" is completed above

* Drive firm is not updated by above operation. If you wish update Drive firm, please prepare the disc for latest firmware update, and write again.

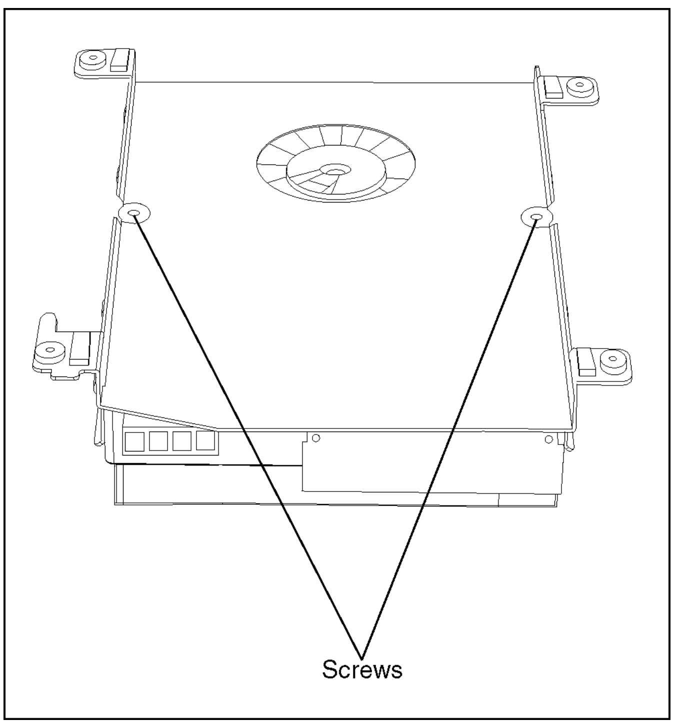
* If the version of the firm you have prepared was same as or later than has already been written in deck, "UNSUPPORT" is displayed on FL.

* In a usual updating of firmware, writing is not performed when the timer reservation standby was not released.

1. Remove ATAPI Connector and HDD Power Connector.
2. Remove 4 Screws (A) to remove HDD Angle with HDD.



3. Put HDD with Angle up side down not to give a shock to HDD.
4. Remove 2 screws to remove HDD.



Handling of HDD

The following precautions should be taken when handling HDD.

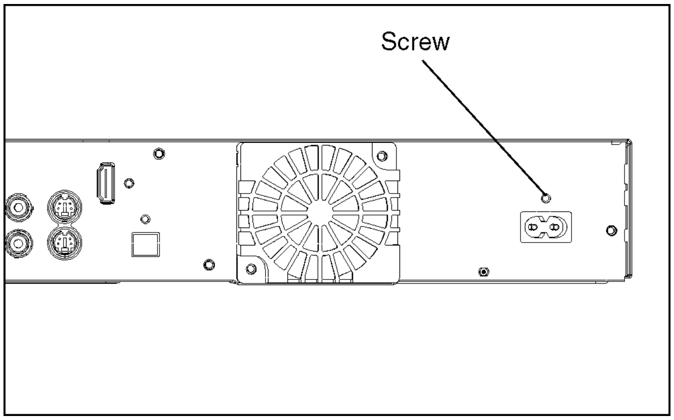
a. Never give an impact to HDD. (Even a drop from 1 cm height can be a cause of HDD failure).
b. When placing HDD on a workbench, provide a mat on a bench for shock absorption and anti-static purposes.
c. When installing HDD, release it from your hands only after confirming that it is fully set on the chassis.
d. Avoid stacking up HDD.
e. HDD is unstable and easy to fall. Do not stand it on its side face.
f. When handling HDD, hold its side faces to avoid static hazard.
g. Do not place HDD on its wrapping bag after removal. (Prevention of static hazard.)
h. Use a screwdriver with low impact and anti-static features.

Note:

When replacing HDD, please make the rear jumper slave or cable select configuration.

10.9. POWER P.C.B.

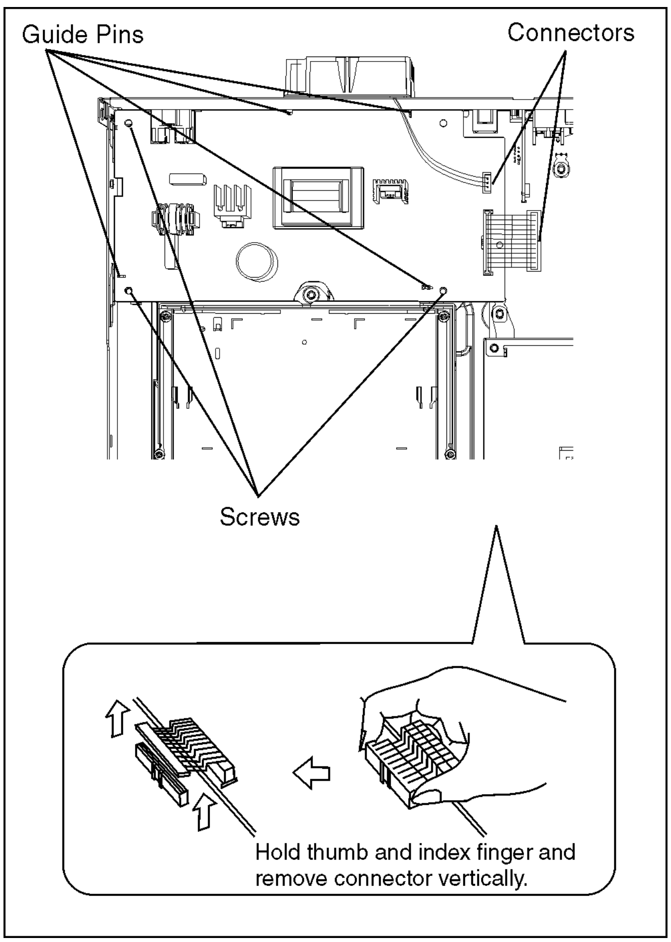
1. Remove the Screw (AC Inlet).



2. Remove 3 Screws and disconnect the 2 Connectors.
3. Lift up Power P.C.B. a little upwards and remove the P.C.B. sideways out of the Guide Pins.

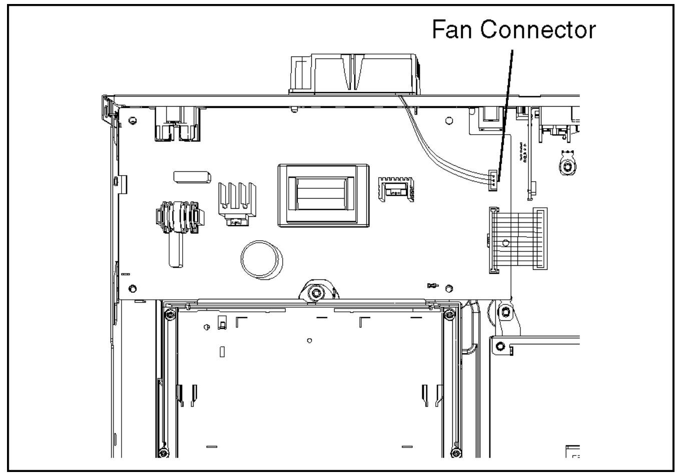
Note:

When inserting P.C.B. confirm correct positions of Guide Pins.

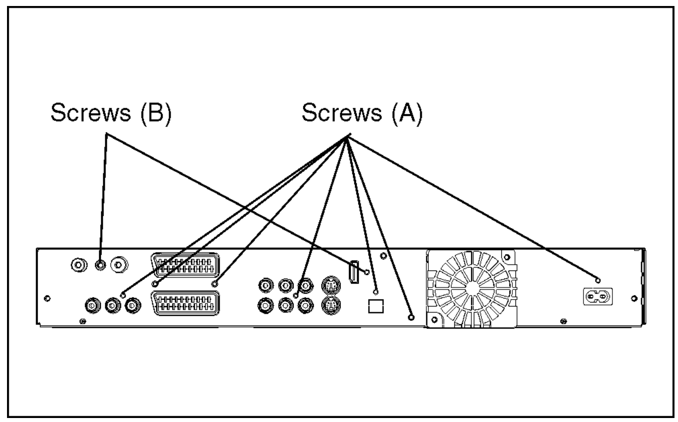


10.10. REAR PANEL

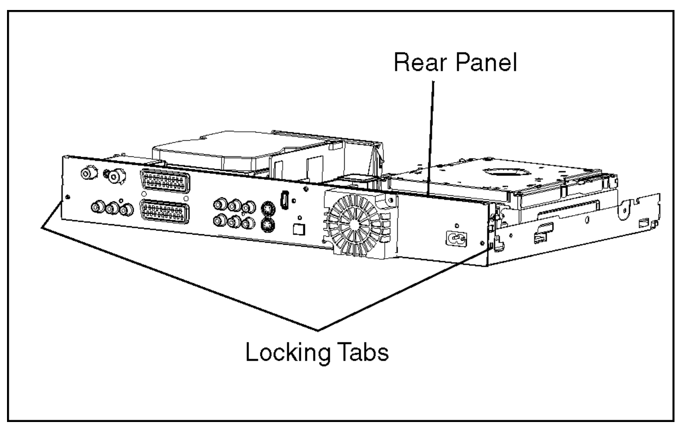
1. Disconnect Fan Connector.



2. Remove 7 Screws (A) and 2 Screws (B).

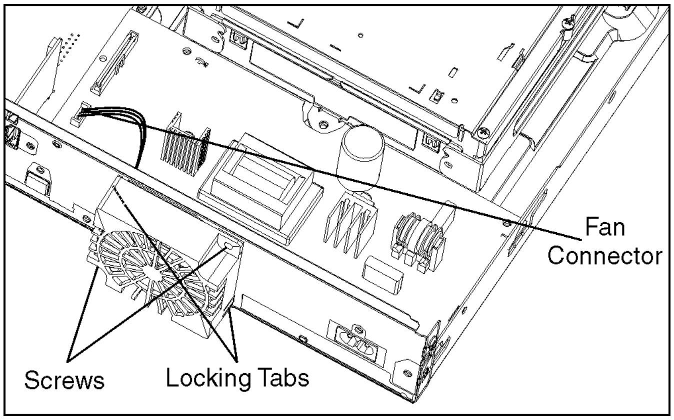


3. Unlock 2 Locking Tabs to remove Rear Panel.



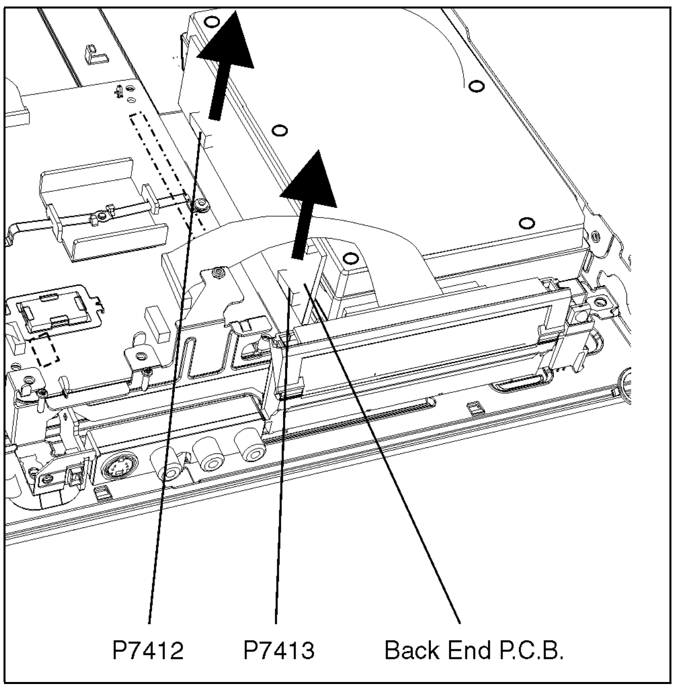
10.10.1. FAN MOTOR

1. Disconnect Fan Connector.
2. Remove the 2 Screws.
3. Push and unlock 2 locking Tabs to remove Fan Motor.



10.11. BACK END P.C.B.

1. Pull out the Back End P.C.B. in the direction to the arrow.

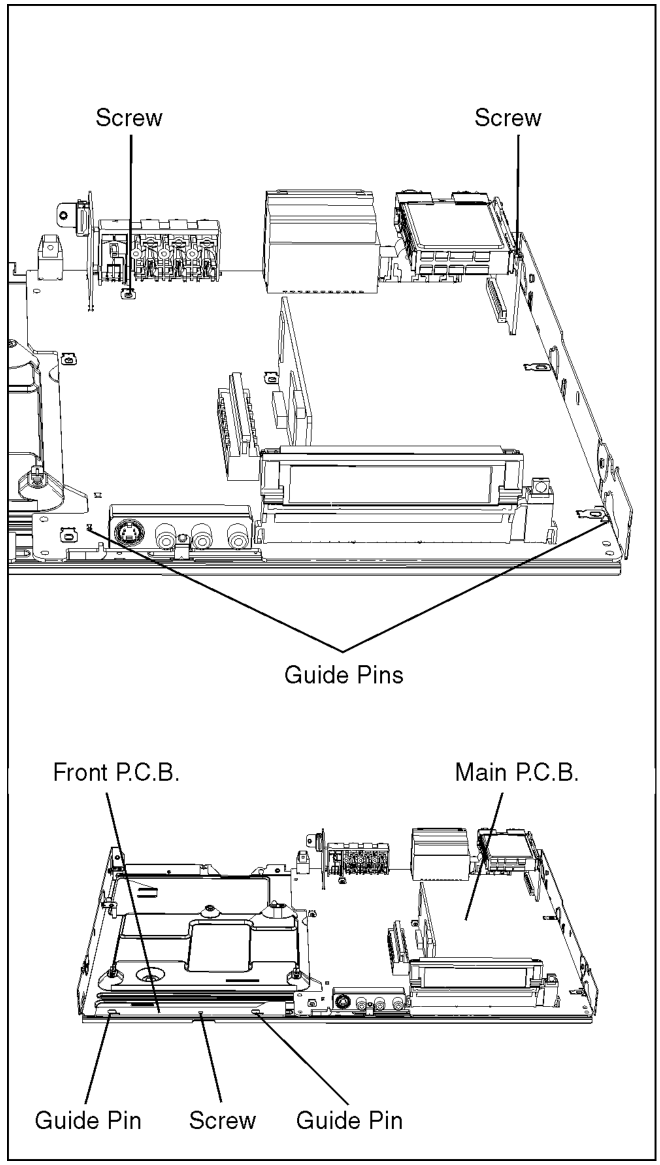


10.12. MAIN P.C.B. AND FRONT P.C.B.

1. Remove 2 Screws from Main P.C.B. .
2. Remove 1 Screw from Front P.C.B. .
3. Pull out Main P.C.B. together with Front P.C.B. .

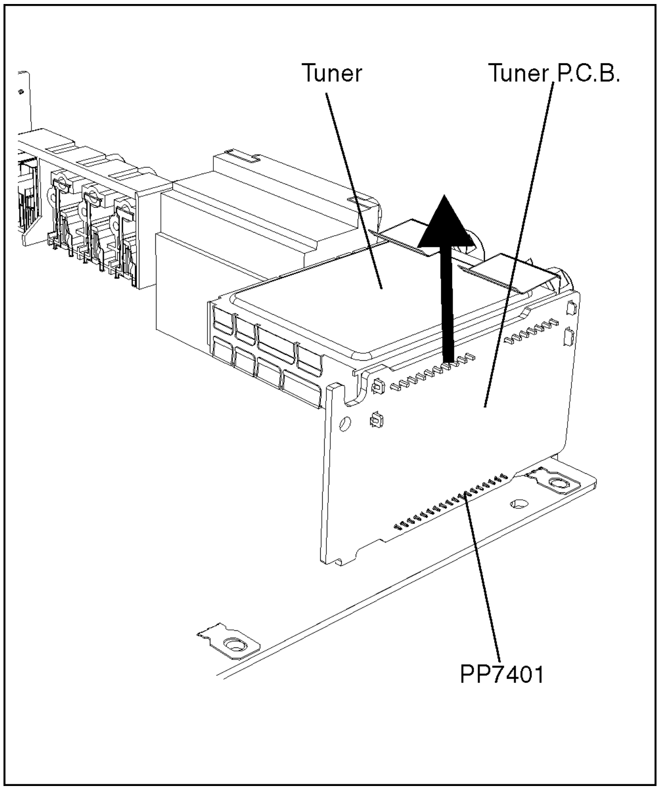
Note:

When inserting P.C.B. confirm correct positions of Guide Pins.



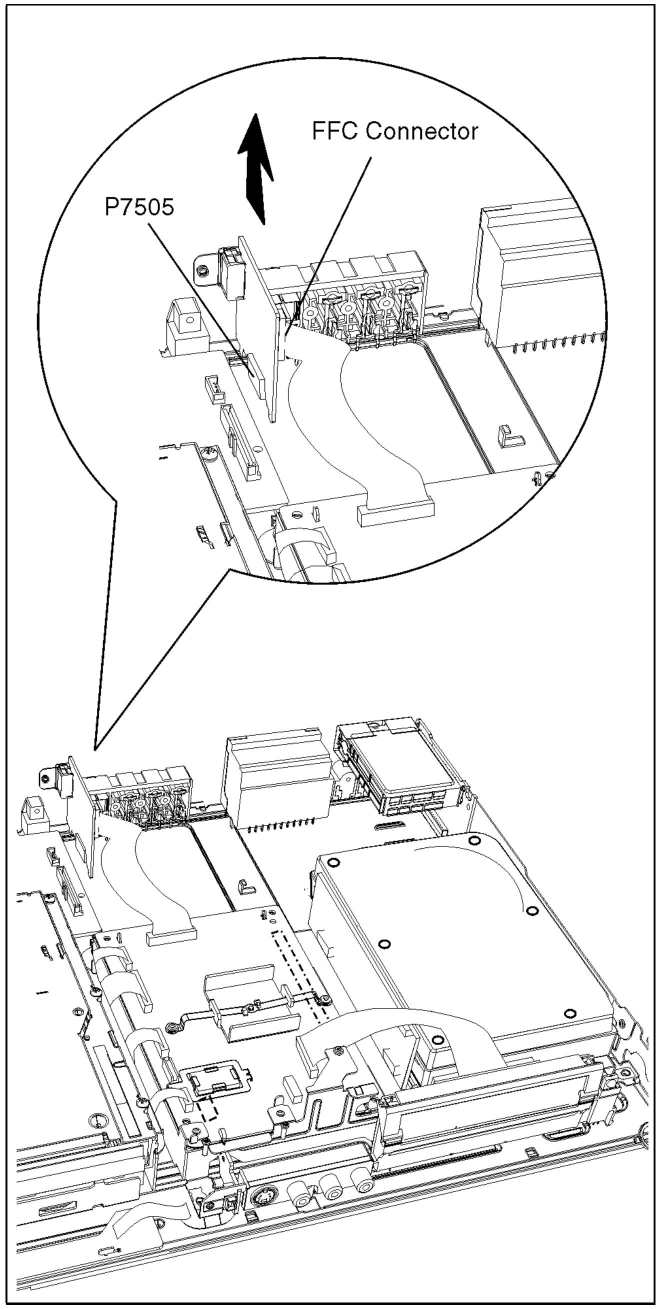
10.13. TUNER P.C.B. AND TUNER

1. Pull out the Tuner P.C.B. in the direction of the arrow.
2. Remove Solder and pull out Tuner from Tuner P.C.B. .



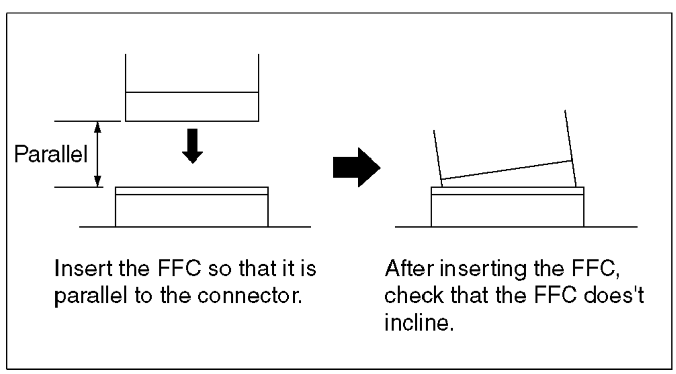
10.14. HDMI P.C.B.

1. Disconnect FFC Connector.
2. Pull out the HDMI P.C.B. in the direction of the arrow.



Caution:

When replacing HDMI P.C.B., pay attention as below.



11 MEASUREMENTS AND ADJUSTMENTS

11.1. SERVICE POSITIONS

Note:

For description of the disassembling procedure, see the section ASSEMBLING AND DISASSEMBLING (DISASSEMBLY FLOW CHART).

11.1.1. CHECKING AND REPAIRING OF POWER P.C.B.

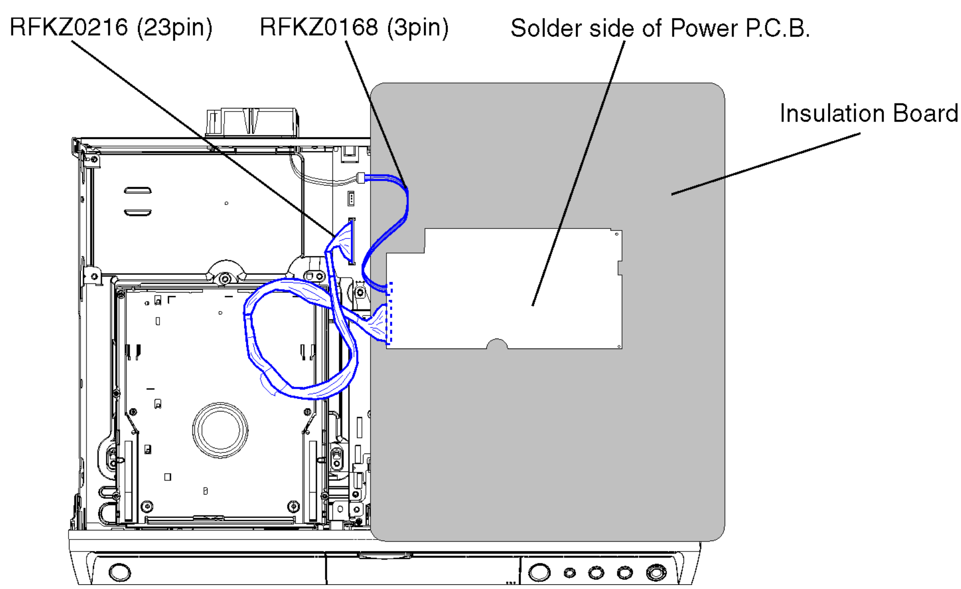
1. Top Case
   - Remove 2 Screws (A) on side
   - Remove 3 rear Screws (B) on rear
   - Remove Top Case
2. Power P.C.B.
   - Remove 1 Screw for AC Inlet fixing
   - Remove 3 Screws fixing Power P.C.B.
   - Remove 1 Connector to Main P.C.B.
   - Remove 1 Connector to Fan P.C.B.
   - Lift up Power P.C.B. sideways out of the Guide Pins.
   - Connect Extension Cable:
     – between Main P.C.B. and Power P.C.B. with RFKZ0216
     – between Fan Motor and Power P.C.B. with RFKZ0168
   - Put Power P.C.B. on Insulation Board so that it's solder side faces top

Caution 1

Red wire in the extension cable should be connected to pin 1

Caution 2

Orginal screws should be used



11.1.2. CHECKING AND REPAIRING OF MAIN P.C.B.

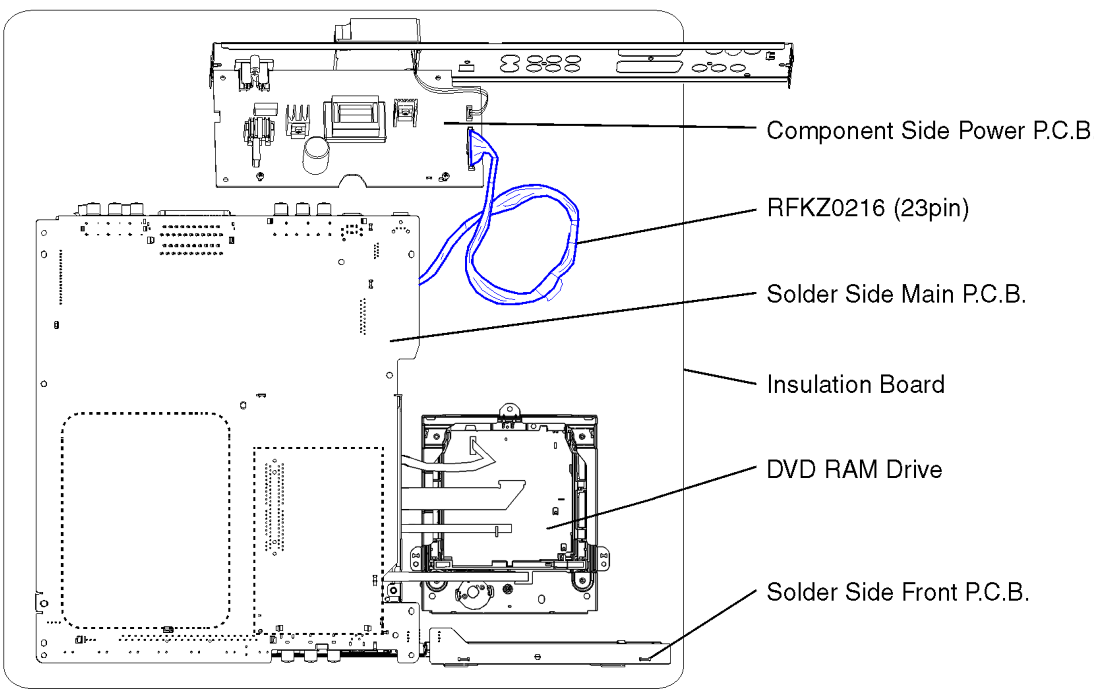
1. Top Case
   - Remove 2 Screws (A) on side and 3 rear Screws (B)
   - Remove Top Case
2. Front Panel
   - Unlock 2 Locking Tabs on the side and 3 Locking Tabs on bottom
   - Remove Front Panel
3. Rear Panel with Fan Motor
   - Remove 7 Screws (A) and 2 Screws (B)
   - Unlock 2 Locking Tabs to remove Rear Panel
4. Power P.C.B.
   - Remove 3 Screws fixing Power P.C.B.
   - Unlock Connector to Main P.C.B.
   - Remove Power P.C.B. together with Rear Panel
5. Hard Disc Drive
   - Remove 4 Screws fixing Hard Disc Drive Angle
6. Digital P.C.B. with SD Card P.C.B. and DV IN P.C.B.
   - Remove 2 Screws fixing Digital P.C.B. Angle
7. Main P.C.B.
   - Remove 2 Screws from Main P.C.B.
   - Remove Screw from Front P.C.B.
   - Unlock Main P.C.B. and Front P.C.B. from Bottom Plate
   - Hold Hard Disc Drive and Digital P.C.B. carefully and put it together with Main P.C.B. up side down on the Insulation Board.
   - Connect the Extension Cable:
     – between Main P.C.B. and Power P.C.B. with RFKZ0216

Caution 1

Red wire in the extension cable should be connected to (1) pin.

Caution2

Orginal screws should be used.



11.1.3. CHECKING AND REPLACING OF DVD-RAM DRIVE

1. Top Case
   - Remove 2 Screws (A) on side and 3 rear Screws (B)
   - Remove Top Case
2. Front Panel
   - Unlock 2 Locking Tabs on side and 3 Locking Tabs on bottom
   - Remove Front Panel
3. SD Card P.C.B.
   - Remove 2 Screws
   - Lift up SD Card P.C.B. and wrap it with insulation sheet.
4. HDD
   - Remove 4 Screws fixing HDD Angle to remove it with HDD
   - Disconnect FFC from HDD
5. RAM/Digital P.C.B. Module
   - Remove 4 Screws fixing DVD-RAM Drive
   - Disconnect FFC from HDMI P.C.B.
   - Lift up Digital P.C.B. slightly to disconnect Main P.C.B. Connector and DV IN P.C.B. Connector on the bottom side.
   - Take DV IN P.C.B. out of the Main P.C.B. and attach it to the Digital P.C.B.
   - Put RAM/Digital P.C.B. Module on the side.

     Connect Extension Cable:

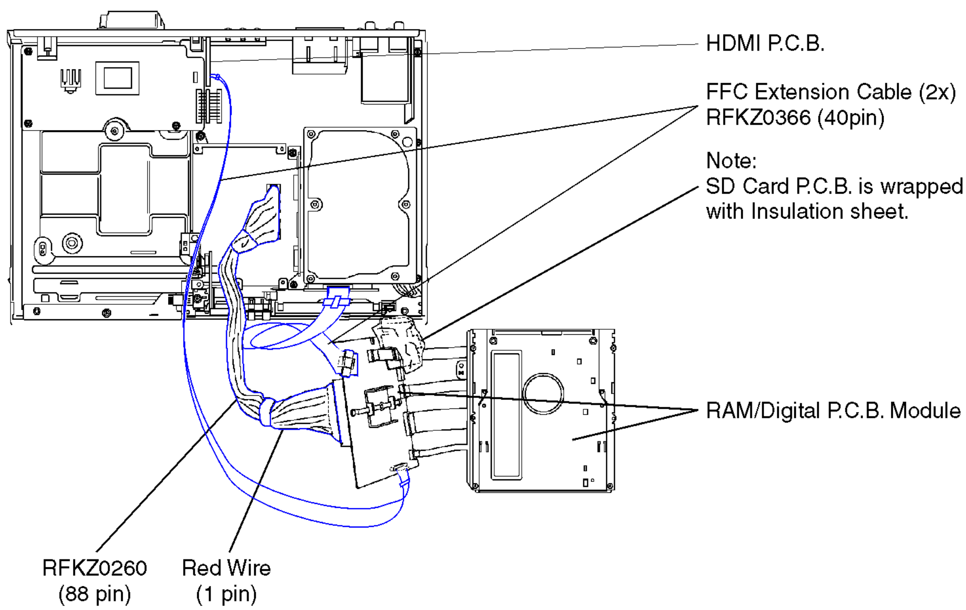
     – between Main P.C.B. and DVD-RAM Drive with RFKZ0260

     – between Hard Disc Drive and Digital P.C.B. with FFC Extension Cable RFKZ0366

     – between HDMI P.C.B. and Digital P.C.B. with FFC Extension Cable RFKZ0366

Caution

Orginal screws should be used.



11.1.4. CHECKING AND REPLACING OF HARD DISC DRIVE

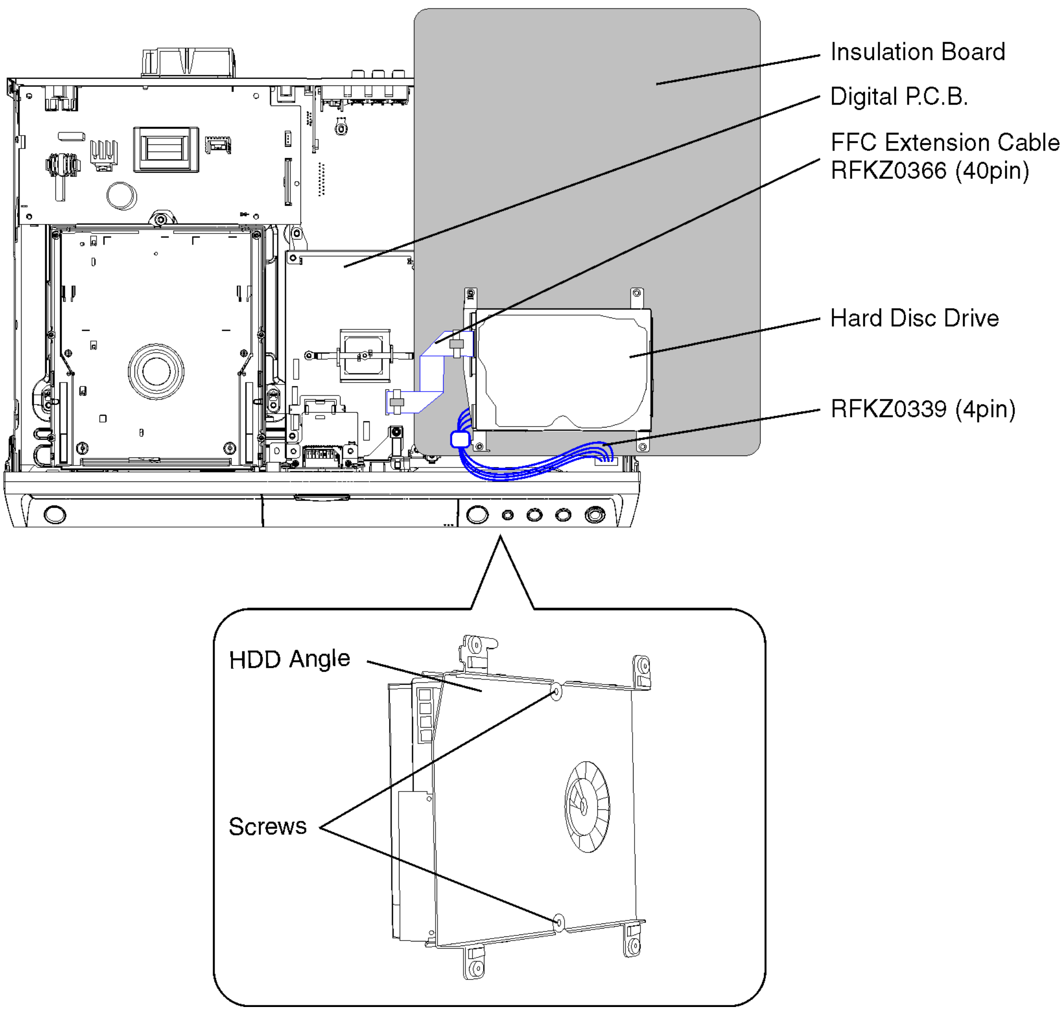
1. Top Case
   - Remove 2 Screws (A) on side
   - Remove 3 rear Screws (B) on rear
   - Remove Top Case
2. Hard Disc Drive
   - Remove 4 Screws of HDD Angle from Main P.C.B.
   - Remove HDD ATAPI Connector
   - Remove Power Cable from HDD
   - Remove 2 Screws from HDD to disconnect HDD Angle
   - Put Replacement HDD on Insulation Board
   - Connect Extension Cable:
     – between Main P.C.B. and HDD with RFKZ0339
     – between Digital P.C.B. and HDD with FFC Extension Cable RFKZ0366

Caution

Orginal screws should be used.

Caution for Removing Hard Disc Drive

Put HDD with HDD Angel up side down and remove the screws without giving a shock to HDD.



11.2. CAUTION FOR REPLACING PARTS

11.2.1. ITEMS THAT SHOULD BE DONE AFTER REPLACING PARTS

✓: Necessary — : Unnecessary

Replacing Parts \ Items that Should be done	Reset IC7501 * Note 1	Obtain and register a new registration code (Except EX75EB/EX85EB) * Note 2	Main Firm update * Note 3	HDD Format
Main P.C.B.	✓	✓	—	✓
IC7501 (Timer IC)	✓	—	—	—
IC7404 (EEPROM)	—	✓	—	✓
HDD	—	—	✓	✓

*** Note 1: (Resetting Method)**

Resetting object	Condition of power	Short Terminal
IC7501 (Timer IC)	POWER ON	IC7502-4 (Reset_L) and (GND)

*** Note 2:**

Please will always pass the customer “Warning for Customers Who Use the DivX Video-on-Demand content.” with the product and get it when you unavoidably exchange EEPROM or P.C.B. including EEPROM (When the product is exchanged, it is the same.).

You must use print attached to service part (EEPROM or P.C.B. including EEPROM) or must use copy of print below as “Warning for Customers who use the DivX Video-on-Demand content.”Information needed without fail for the customer for whom it is used continuing DivX Video-on-Demand Service to “Manual for the customer” is recorded.

Appendix:* Parts that memorize user’s information are only EEPROM.* The registration of Registration Code is possible for half a year up to 6 recorders up to 10 recorders a year. Replacement of EEPROM or P.C.B. including EEPROM spends one of this.

Registration Code is memorized in EEPROM (RFKxxxxxx).
Model without VHS: on Main P.C.B.Model with VHS: on Digital I/F P.C.B. (Power & DVD I/F/P.C.B.)If exchange above P.C.B. or EEPROM, new registration Code differ from previous Registration Code will be generated.In this case if your customer uses DivX Video-on-Demand service, he/she will no longer be able to play any content that he/she purchased under that same registration code.Therefore your customer will need to obtain and register the new registration code.

*Copy this page and cut on the dotted line and give the lower half to your customer.

Warning for Customers who use the DivX Video-on-Demand content.

1. The registration code has been changed for the repair of the product or the product exchange.
2. Obtain and register a new registration code, otherwise you will no longer be able to play DivX Video-on-Demand content.
3. Follow the procedure on the DivX Video-on-Demand web site to register at
   http://vod.divx.com/

   * If you do not use the DivX Video-on-Demand content, please ignore this warning.

*** Note 3:**

Please prepare latest firmware updating disc.

*Main Firm is being recorded in HDD, but new HDD has no data.

CAUTION:

- Writing of Main Firm needs 3, 4 minutes.
- Never cut the power of DVD Recorder until writing in Firmware ends.
- Initial settings and contents of reservation will not change if writing is normally completed.

Writing Procedure of Main Film:

1. Prepare updating disc for firm ware
2. Replace HDD
3. Turn on power of DVD Recorder
4. After [PLEASE WAIT] is displayed on FL., [HDD ERR] is displayed on FL
5. Tray opens automatically
6. Insert updating disc for Firmware and press OPEN / CLOSE key
   (If a wrong disc was insered, [NG DISK] [NO FVU] is displayed on FL.)
7. [LOAD] → [LD FVU] ←→ [M_FIRM] are displayed on FL alternately
8. [MAIN] ←→ [UPD OK] blink alternately and Tray opens. Take out disc (Writing was finished)
9. Press Power button to turn off power
10. Press Power button to turn on power
11. [HELLO] → [SELF CHECK] are displayed on FL
12. [UNFORMATED] is displayed on FL
13. After [UNFORMAT] was displayed, message to request FORMAT is displayed on TV screen
14. Select [Yes] and press [ENTER] key to format HDD
    (After FORMAT, program in HDD will be lost, but Main firm will not be lost
    “Write of the main farm” is completed above

* Drive firm is not updated by above operation. If you wish update Drive firm, please prepare the disc for latest firmware update, and write again.

* If the version of the firm you have prepared was same as or later than has already been written in deck, “UNSUPPORT” is displayed on FL.

* In a usual updating of firmware, writing is not performed when the timer reservation standby was not released.

11.2.2. NOTICE AFTER REPLACING RAM/DIGITAL P.C.B. MODULE

After replacing RAM/Digital P.C.B. Module, “TM AV1” is displayed on FL. Once power off, and start-up again.

11.3. STANDARD INSPECTION SPECIFICATIONS AFTER MAKING REPAIRS

After making repairs, we recommend performing the following inspection, to check normal operation.

No.	Procedure	Item to Check
1	Turn on the power, and confirm items pointed out.	Items pointed out should reappear.
2	Insert RAM disc.	The Panasonic RAM disc should be recognized.
3	Enter the EE (TU IN / AV IN - AV OUT) mode.	No abnormality should be seen in the picture, sound or operation.
4	Perform auto recording and playback for one minute using the RAM disc.	No abnormality should be seen in the picture, sound or operation. *Panasonic DVD-RAM disc should be used when recording and playback.
5	If a problem is caused by a VCD, DVD-R, DVD-Video, Audio-CD, or MP3, playback the test disc.	No abnormality should be seen in the picture, sound or operation.
6	After checking and making repairs, upgrade the firmware to the latest version.	Make sure that [UPD OK] appears in the FL displays.
7	Transfer [9][9] in the service mode setting, and initialize the service settings (return various settings and error information to their default values. The laser time is not included in this initialization).	Make sure that [CLR] appears in the FL display. After checking it, turn the power off.
8	After checking and making repairs, upgrade the firmware to the latest version.	Make sure that [UPD OK] appears in the FL displays. *[UNSUPPORT] display means the unit is already updated to newest same version. Then version up is not necessary.
9	Transfer [9][9] in the service mode setting, and initialize the service settings (return various settings and error information to their default values. The laser time is not included in this initialization).	Make sure that [CLR] appears in the FL display. After checking it, turn the power off.
10	When replacing of RAM drive, transfer [9] [5] in the service mode setting to delete Laser used time.	Make sure that [CLR] appears in the FL display. After that, turn power off.

Use the following checklist to establish the judgement criteria for the picture and sound.

Item	Contents	Check	Item	Contents	Check
Picture	Block noise		Sound	Distorted sound	
	Crosscut noise			Noise (static, background noise, etc.)	
	Dot noise			The sound level is too low.	
	Picture disruption			The sound level is too high.	
	Not bright enough			The sound level changes.	
	Too bright				
	Flickering color				
	Color fading				

11.4. ABBREVIATIONS

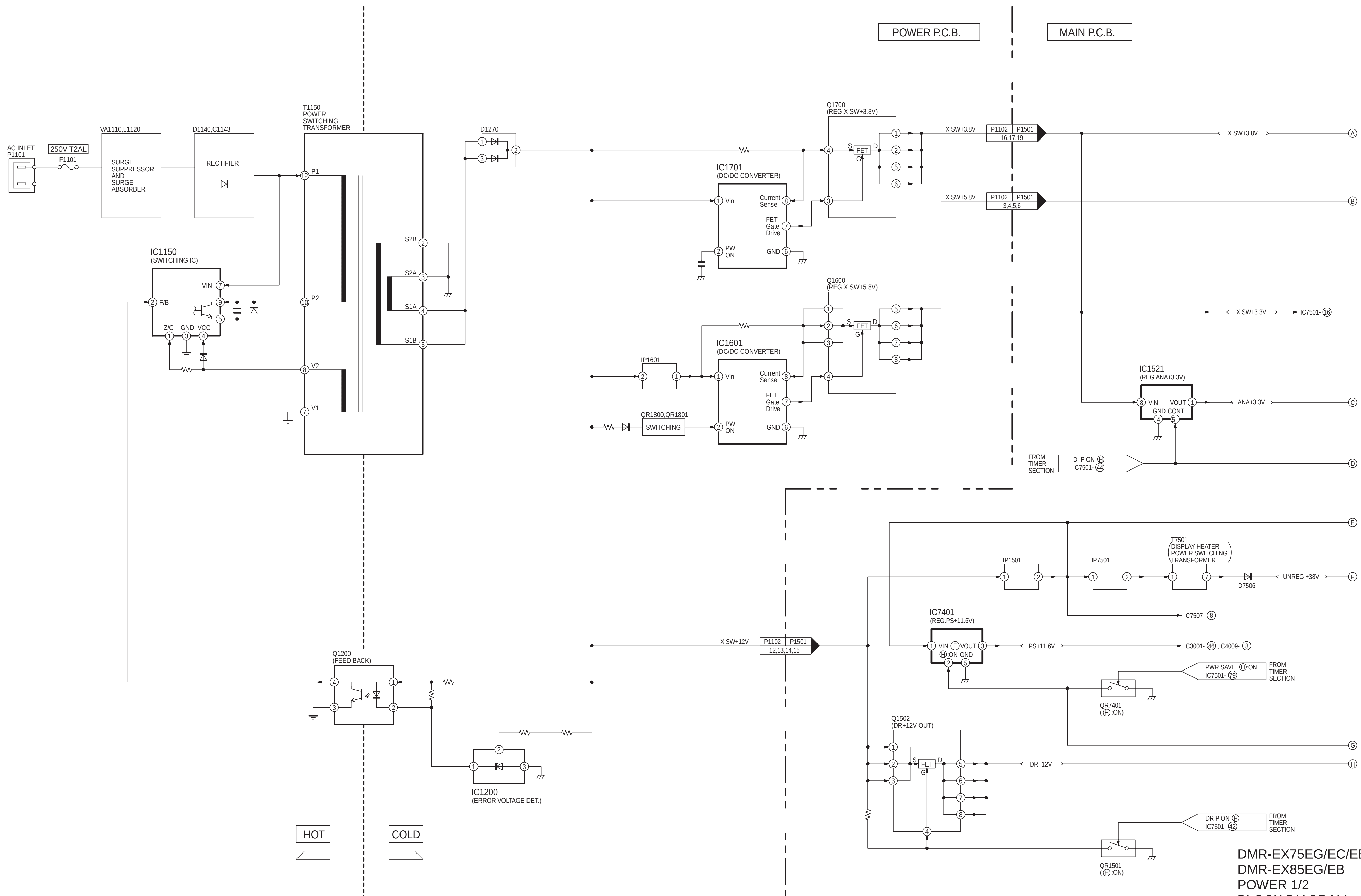
INITIAL/LOGO		ABBREVIATIONS
A	A0~UP	ADDRESS
	ACLK	AUDIO CLOCK
	AD0~UP	ADDRESS BUS
	ADATA	AUDIO PES PACKET DATA
	ALE	ADDRESS LATCH ENABLE
	AMUTE	AUDIO MUTE
	AREQ	AUDIO PES PACKET REQUEST
	ARF	AUDIO RF
	ASI	SERVO AMP INVERTED INPUT
	ASO	SERVO AMP OUTPUT
	ASYNC	AUDIO WORD DISTINCTION SYNC
B	BCK	BIT CLOCK (PCM)
	BCKIN	BIT CLOCK INPUT
	BDO	BLACK DROP OUT
	BLKCK	SUB CODE BLOCK CLOCK
	BOTTOM	CAP. FOR BOTTOM HOLD
	BYP	BYPATH
	BYTCK	BYTE CLOCK
C	CAV	CONSTANT ANGULAR VELOCITY
	CBDO	CAP. BLACK DROP OUT
	CD	COMPACT DISC
	CDSCK	CD SERIAL DATA CLOCK
	CDSRDATA	CD SERIAL DATA
	CDRF	CD RF (EFM) SIGNAL
	CDV	COMPACT DISC-VIDEO
	CHNDATA	CHANNEL DATA
	CKSL	SYSTEM CLOCK SELECT
	CLV	CONSTANT LINEAR VELOCITY
	COFTR	CAP. OFF TRACK
	CPA	CPU ADDRESS
	CPCS	CPU CHIP SELECT
	CPDT	CPU DATA
	CPUADR	CPU ADDRESS LATCH
	CPUADT	CPU ADDRESS DATA BUS
	CPUIRQ	CPU INTERRUPT REQUEST
	CPRD	CPU READ ENABLE
	CPWR	CPU WRITE ENABLE
	CS	CHIP SELECT
	CSYNCIN	COMPOSITE SYNC IN
	CSYNCOUT	COMPOSITE SYNC OUT
D	DACCK	D/A CONVERTER CLOCK
	DEEMP	DEEMPHASIS BIT ON/OFF
	DEMPH	DEEMPHASIS SWITCHING
	DIG0~UP	FL DIGIT OUTPUT
	DIN	DATA INPUT
	DMSRCK	DM SERIAL DATA READ CLOCK
	DMUTE	DIGITAL MUTE CONTROL
	DO	DROP OUT
	DOUT0~UP	DATA OUTPUT
	DRF	DATA SLICE RF (BIAS)
	DRPOUT	DROP OUT SIGNAL
	DREQ	DATA REQUEST
	DRESP	DATA RESPONSE
	DSC	DIGITAL SERVO CONTROLLER
	DSLF	DATA SLICE LOOP FILTER
	DVD	DIGITAL VIDEO DISC
E	EC	ERROR TORQUE CONTROL
	ECR	ERROR TORQUE CONTROL REFERENCE
	ENCSEL	ENCODER SELECT
	ETMCLK	EXTERNAL M CLOCK (81MHz/40.5MHz)
	ETSCLK	EXTERNAL S CLOCK (54MHz)
F	FBAL	FOCUS BALANCE
	FCLK	FRAME CLOCK
	FE	FOCUS ERROR
	FFI	FOCUS ERROR AMP INVERTED INPUT
	FEO	FOCUS ERROR AMP OUTPUT
	FG	FREQUENCY GENERATOR
	FSC	FREQUENCY SUB CARRIER
	FSCK	FS (384 OVER SAMPLING) CLOCK
G	GND	COMMON GROUNDING (EARTH)
H	HA0~UP	HOST ADDRESS
	HD0~UP	HOST DATA
	HINT	HOST INTERRUPT
	HRXW	HOST READ/WRITE

INITIAL/LOGO		ABBREVIATIONS
I	IECOUT	IEC958 FORMAT DATA OUTPUT
	IPFRAG	INTERPOLATION FLAG
	IREF	I (CURRENT) REFERENCE
	ISEL	INTERFACE MODE SELECT
L	LDON	LASER DIODE CONTROL
	LPC	LASER POWER CONTROL
	LRCK	L CH/R CH DISTINCTION CLOCK
M	MA0~UP	MEMORY ADDRESS
	MCK	MEMORY CLOCK
	MCKI	MEMORY CLOCK INPUT
	MCLK	MEMORY SERIAL COMMAND CLOCK
	MDATA	MEMORY SERIAL COMMAND DATA
	MDQ0~UP	MEMORY DATA INPUT/OUTPUT
	MDQM	MEMORY DATA I/O MASK
	MLD	MEMORY SERIAL COMMAND LOAD
	MPEG	MOVING PICTURE EXPERTS GROUP
O	ODC	OPTICAL DISC CONTROLLER
	OFTR	OFF TRACKING
	OSCI	OSCILLATOR INPUT
	OSCO	OSCILLATOR OUTPUT
	OSD	ON SCREEN DISPLAY
P	P1~UP	PORT
	PCD	CD TRACKING PHASE DIFFERENCE
	PCK	PLL CLOCK
	PDVD	DVD TRACKING PHASE DIFFERENCE
	PEAK	CAP. FOR PEAK HOLD
	PLLCLK	CHANNEL PLL CLOCK
	PLLOK	PLL LOCK
	PWMCTL	PWM OUTPUT CONTROL
	PWMDA	PULSE WAVE MOTOR DRIVE A
	PWMOA, B	PULSE WAVE MOTOR OUT A, B
R	RE	READ ENABLE
	RFENV	RF ENVELOPE
	RFO	RF PHASE DIFFERENCE OUTPUT
	RS	(CD-ROM) REGISTER SELECT
	RSEL	RF POLARITY SELECT
	RST	RESET
	RSV	RESERVE
S	SBI0, 1	SERIAL DATA INPUT
	SBO0	SERIAL DATA OUTPUT
	SBT0, 1	SERIAL CLOCK
	SCK	SERIAL DATA CLOCK
	SCKR	AUDIO SERIAL CLOCK RECEIVER
	SCL	SERIAL CLOCK
	SCLK	SERIAL CLOCK
	SDA	SERIAL DATA
	SEG0~UP	FL SEGMENT OUTPUT
	SELCLK	SELECT CLOCK
	SEN	SERIAL PORT ENABLE
	SIN1, 2	SERIAL DATA IN
	SOUT1, 2	SERIAL DATA OUT
	SPDI	SERIAL PORT DATA INPUT
	SPDO	SERIAL PORT DATA OUTPUT
	SPEN	SERIAL PORT R/W ENABLE
	SPRCLK	SERIAL PORT READ CLOCK
	SPWCLK	SERIAL PORT WRITE CLOCK
	SQCK	SUB CODE Q CLOCK
	SQCX	SUB CODE Q DATA READ CLOCK
	SRDATA	SERIAL DATA
	SRMADR	SRAM ADDRESS BUS
	SRMDT0~7	SRAM DATA BUS 0~7
	SS	START/STOP
	STAT	STATUS
	STCLK	STREAM DATA CLOCK
	STD0~UP	STREAM DATA
	STENABLE	STREAM DATA INPUT ENABLE
	STSEL	STREAM DATA POLARITY SELECT
	STVALID	STREAM DATA VALIDITY
	SUBC	SUB CODE SERIAL
	SBCK	SUB CODE CLOCK
	SUBQ	SUB CODE Q DATA
	SYSCLK	SYSTEM CLOCK

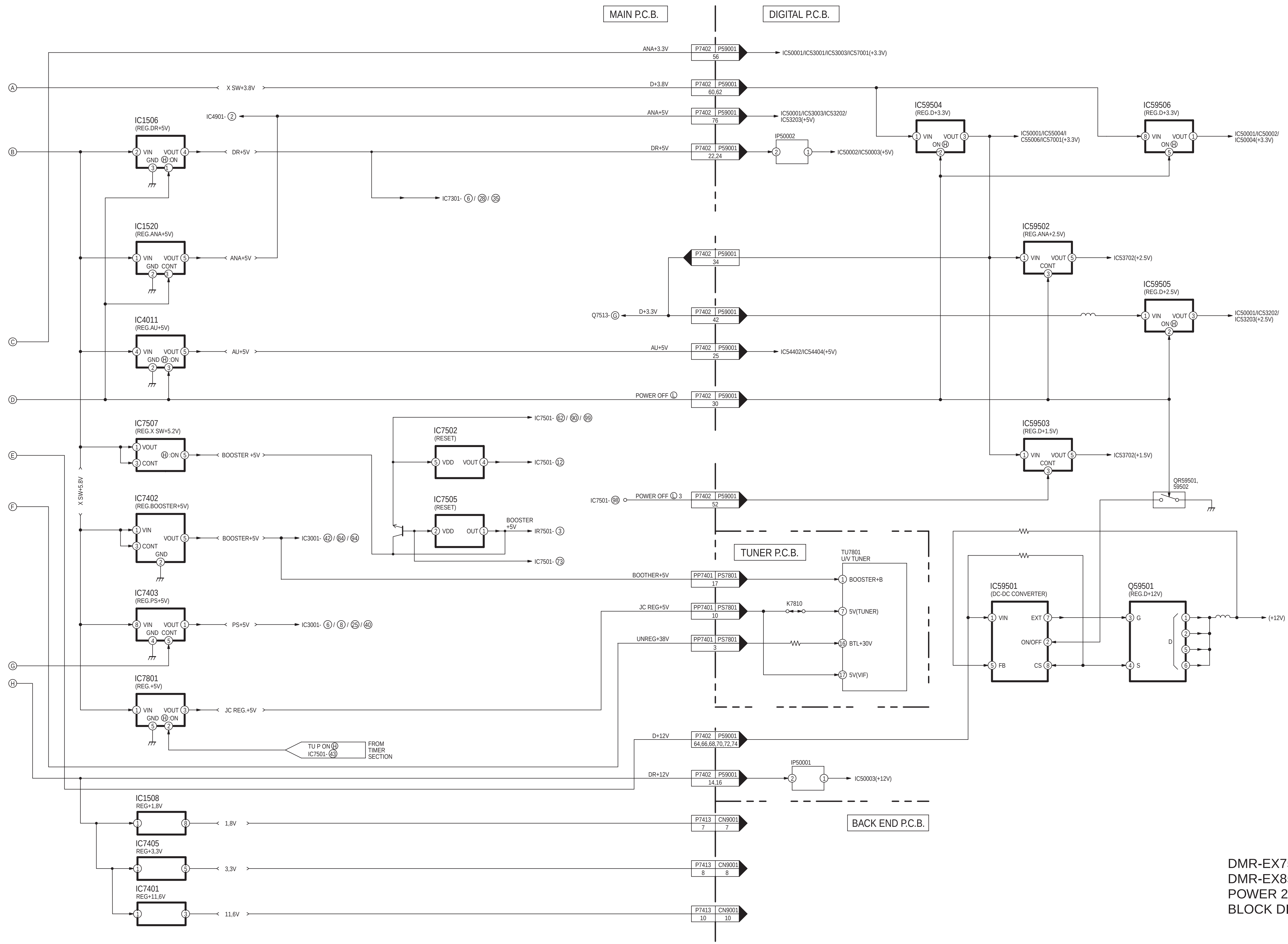
INITIAL/LOGO		ABBREVIATIONS
T	TE	TRACKING ERROR
	TIBAL	BALANCE CONTROL
	TID	BALANCE OUTPUT 1
	TIN	BALANCE INPUT
	TIP	BALANCE INPUT
	TIS	BALANCE OUTPUT 2
	TPSN	OP AMP INPUT
	TPSO	OP AMP OUTPUT
	TPSP	OP AMP INVERTED INPUT
	TRCRS	TRACK CROSS SIGNAL
	TRON	TRACKING ON
	TRSON	TRAVERSE SERVO ON
V	VBLANK	V BLANKING
	VCC	COLLECTOR POWER SUPPLY VOLTAGE
	VCDCONT	VIDEO CD CONTROL (TRACKING BALANCE)
	VDD	DRAIN POWER SUPPLY VOLTAGE
	VFB	VIDEO FEED BACK
	VREF	VOLTAGE REFERENCE
	VSS	SOURCE POWER SUPPLY VOLTAGE
W	WAIT	BUS CYCLE WAIT
	WDCK	WORD CLOCK
	WEH	WRITE ENABLE HIGH
	WSR	WORD SELECT RECEIVER
X	X	X´ TAL
	XALE	X ADDRESS LATCH ENABLE
	XAREQ	X AUDIO DATA REQUEST
	XCDROM	X CD ROM CHIP SELECT
	XCS	X CHIP SELECT
	XCSYNC	X COMPOSITE SYNC
	XDS	X DATA STROBE
	XHSYNCO	X HORIZONTAL SYNC OUTPUT
	XHINT	XH INTERRUPT REQUEST
	XI	X´ TAL OSCILLATOR INPUT
	XINT	X INTERRUPT
	XMW	X MEMORY WRITE ENABLE
	XO	X´ TAL OSCILLATOR OUTPUT
	XRE	X READ ENABLE
	XSRMCE	X SRAM CHIP ENABLE
	XSRMOE	X SRAM OUTPUT ENABLE
	XSRMWE	X SRAM WRITE ENABLE
	XVCS	X V-DEC CHIP SELECT
	XVDS	X V-DEC CONTROL BUS STROBE
	XVSYNCO	X VERTICAL SYNC OUTPUT

12 BLOCK DIAGRAM

12.1. POWER BLOCK DIAGRAM

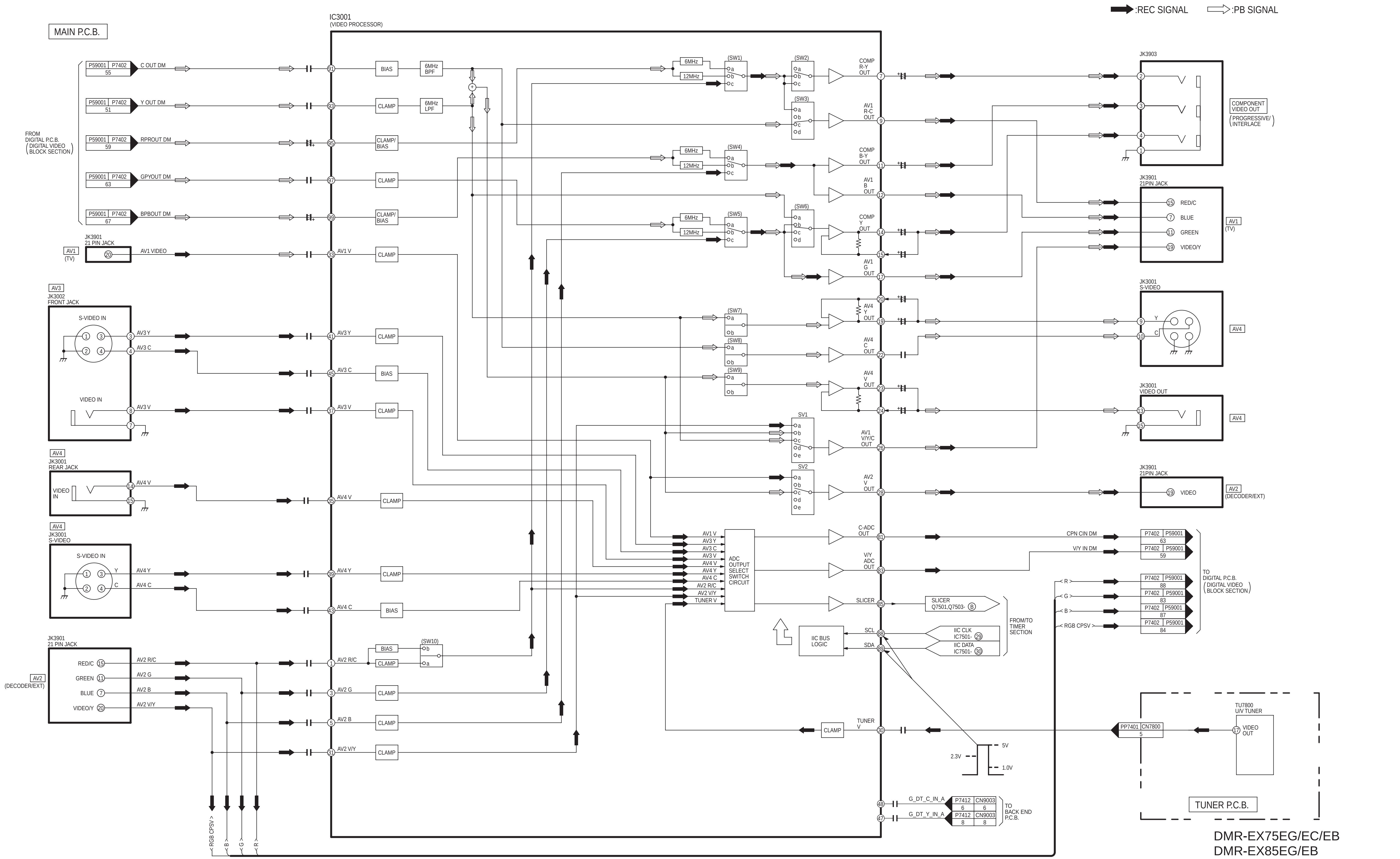


DMR-EX75EG/EC/EB
DMR-EX85EG/EB
POWER 1/2
BLOCK DIAGRAM



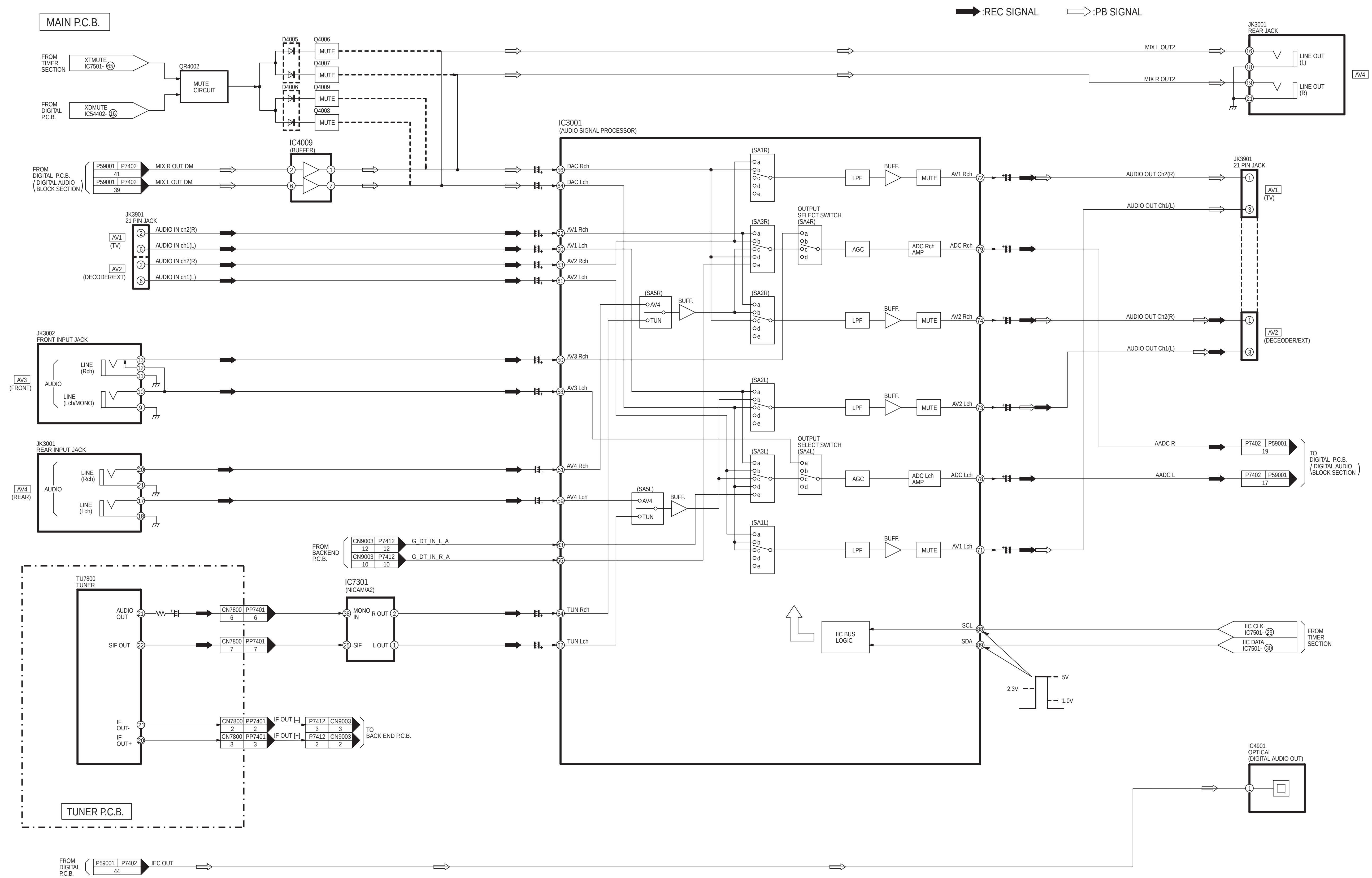
DMR-EX75EG/EC/EB
DMR-EX85EG/EB
POWER 2/2
BLOCK DIAGRAM

12.2. ANALOG VIDEO BLOCK DIAGRAM



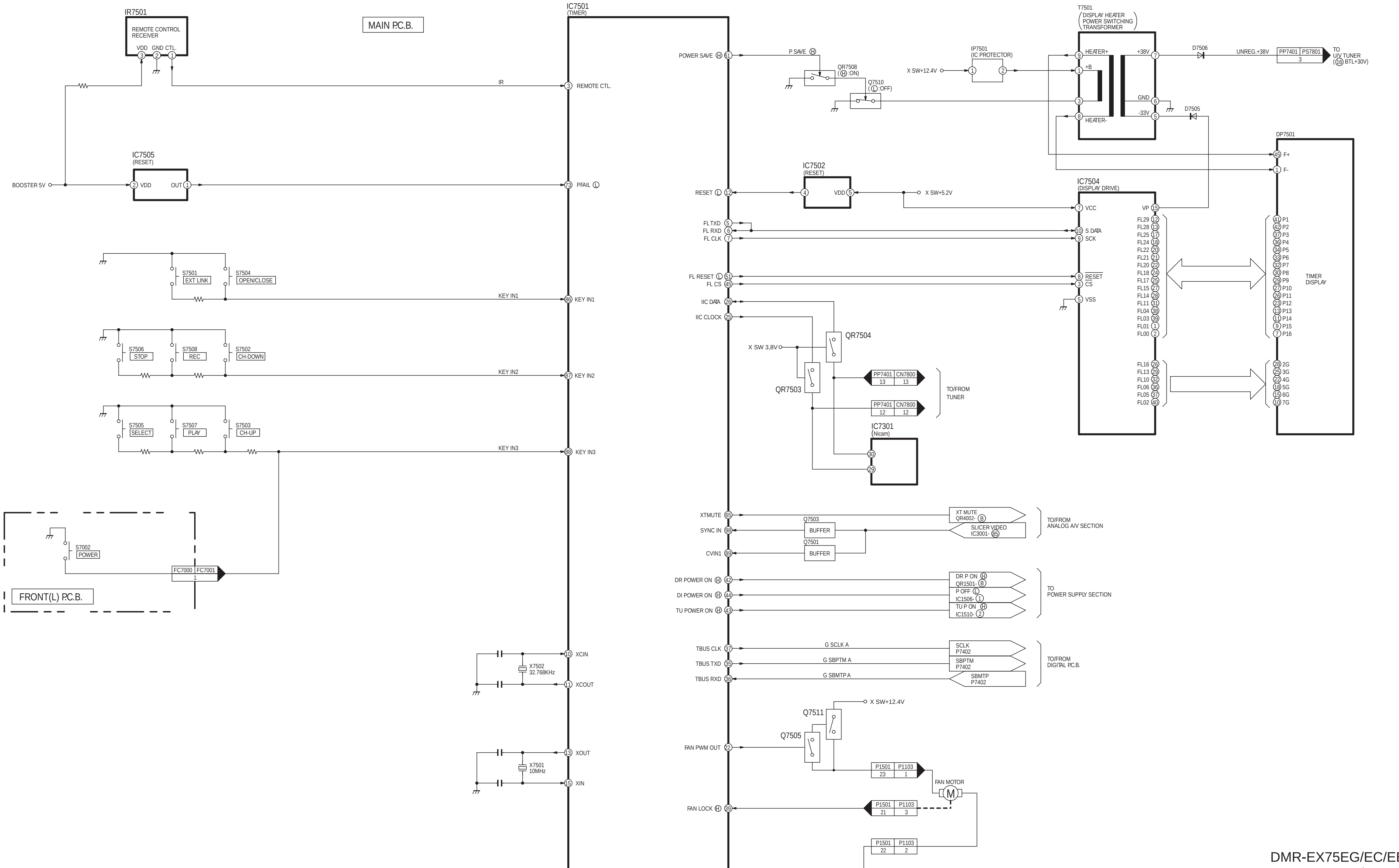
DMR-EX75EG/EC/EB
DMR-EX85EG/EB
ANALOG VIDEO
BLOCK DIAGRAM

12.3. ANALOG AUDIO BLOCK DIAGRAM



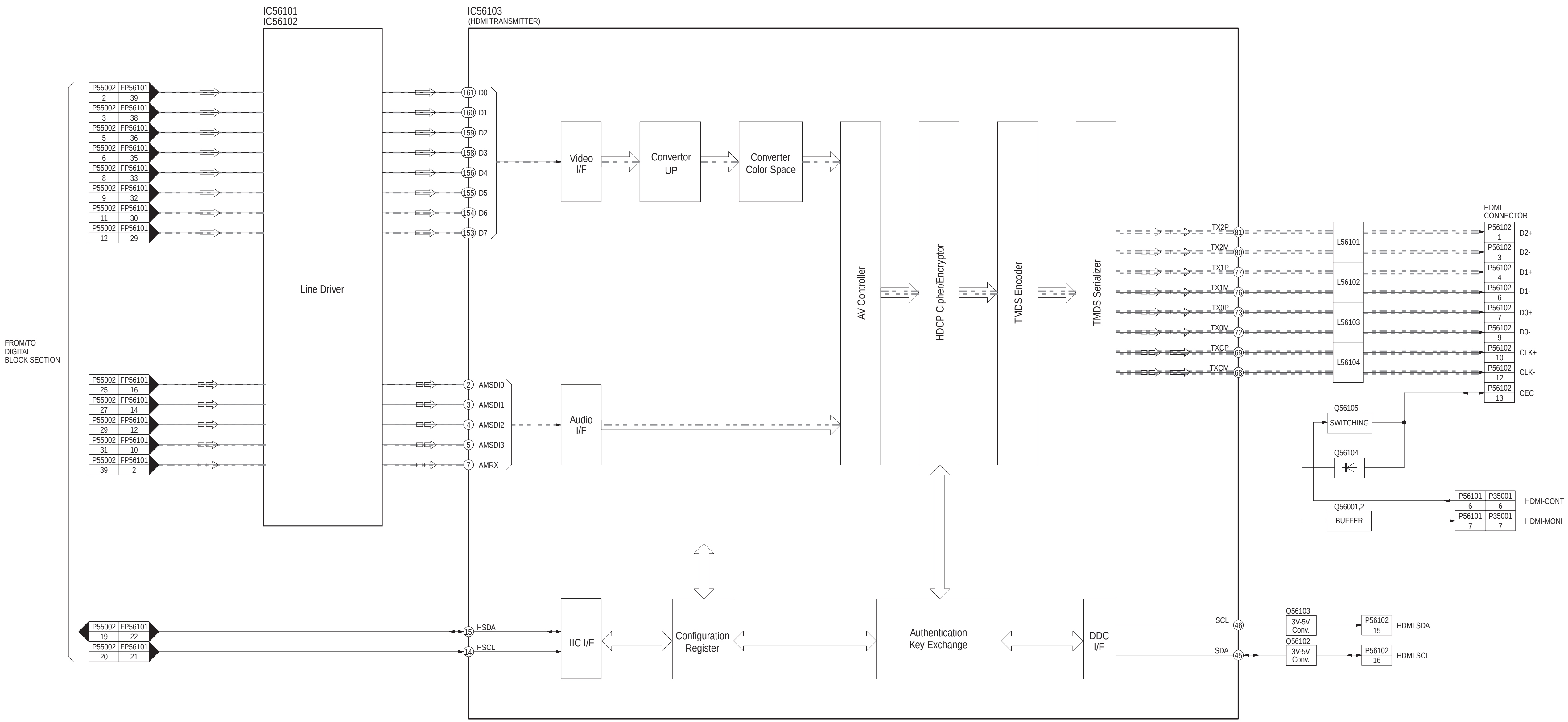
DMR-EX75EG/EC/EB
DMR-EX85EG/EB
ANALOG AUDIO
BLOCK DIAGRAM

12.4. TIMER BLOCK DIAGRAM



DMR-EX75EG/EC/EB
DMR-EX85EG/EB
TIMER
BLOCK DIAGRAM

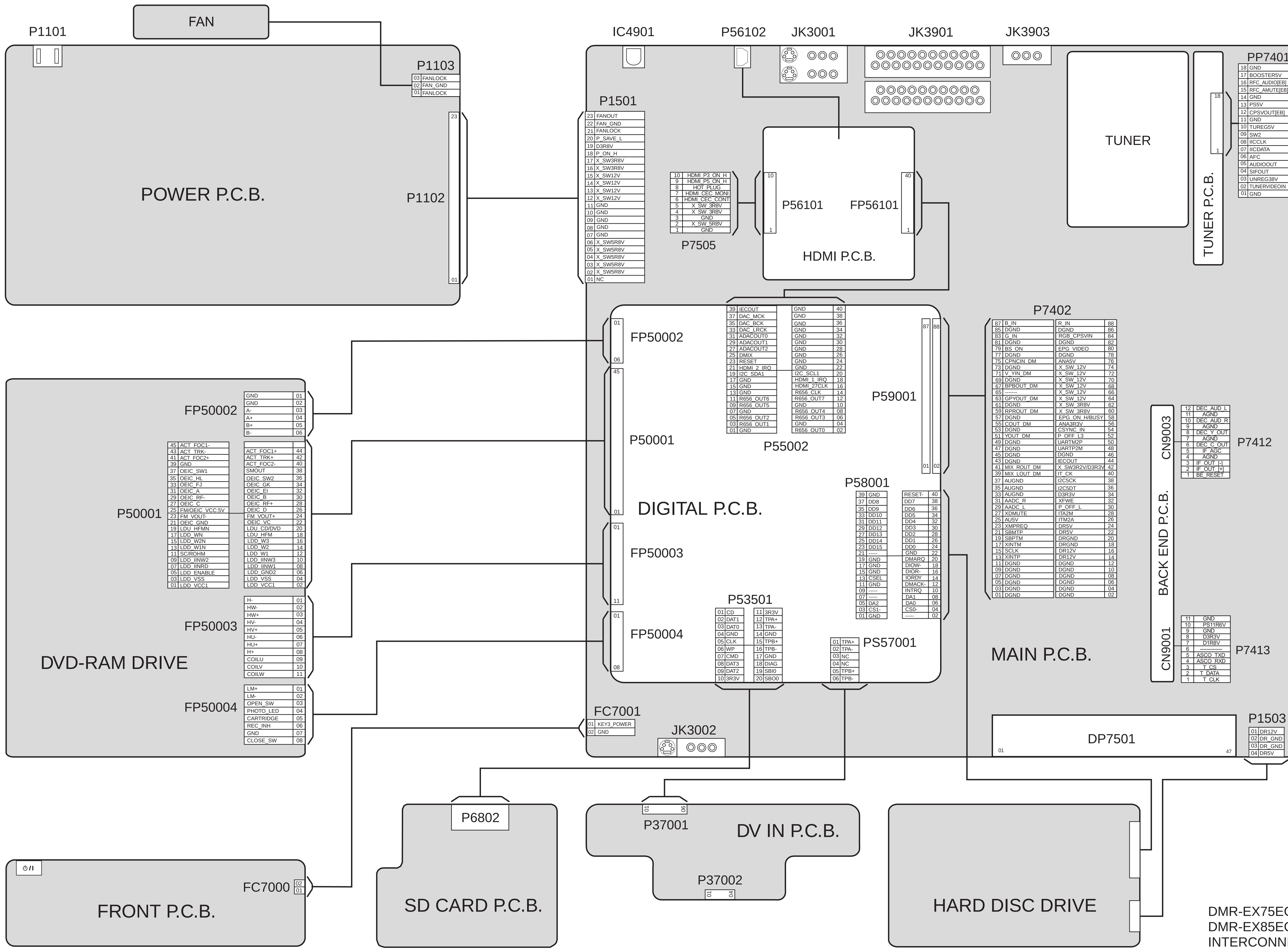
12.5. HDMI BLOCK DIAGRAM



DMR-EX75EG/EC/EB
DMR-EX85EG/EB
HDMI
BLOCK DIAGRAM

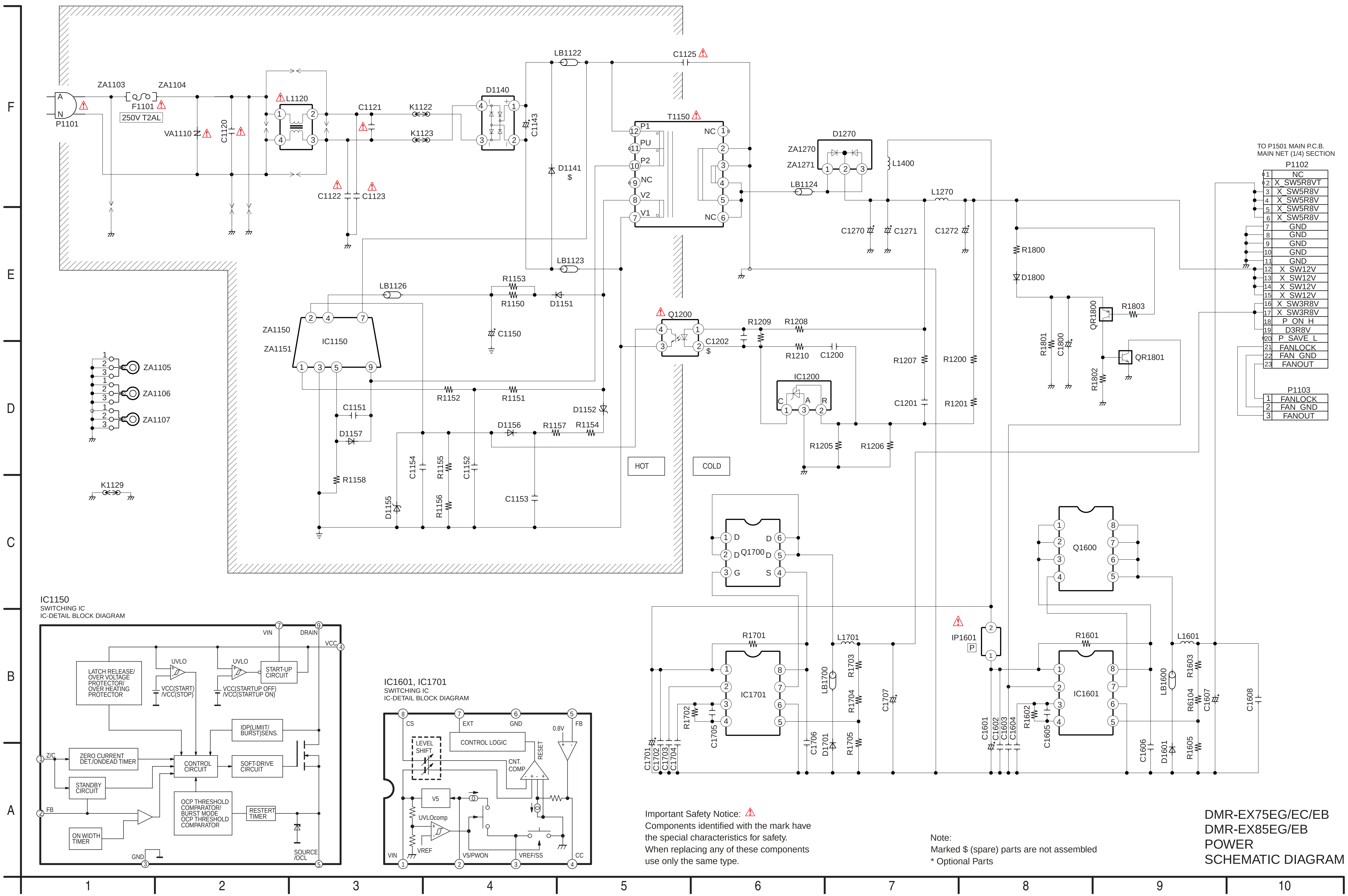
13 SCHEMATIC DIAGRAM

13.1. INTERCONNECTION DIAGRAM



DMR-EX75EG/EB/EC
DMR-EX85EG/EB
INTERCONNECTION DIAGRAM

13.2. POWER

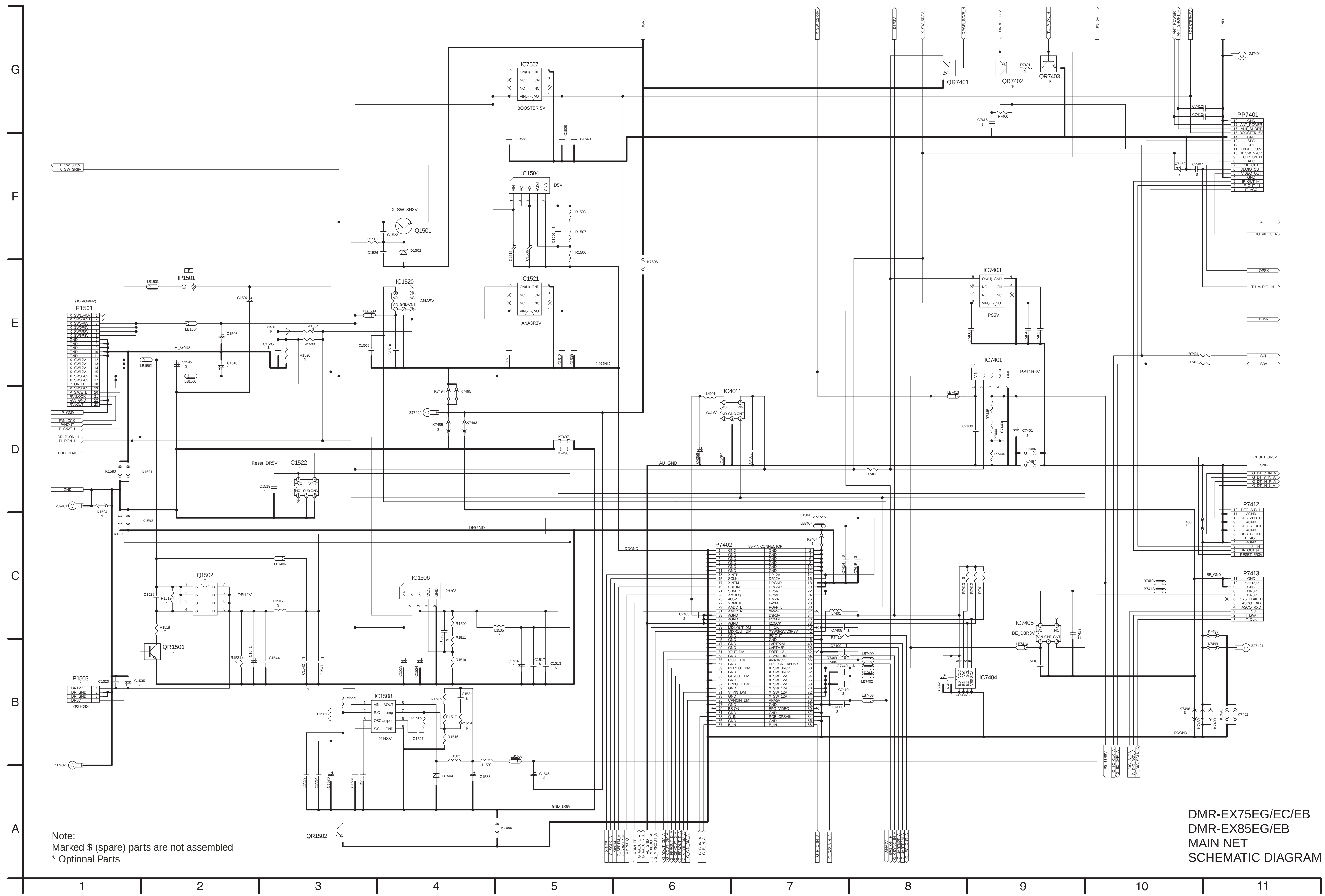


Important Safety Notice: ⚠
Components identified with the mark have the special characteristics for safety.
When replacing any of these components use only the same type.

Note:
Marked $ (spare) parts are not assembled
* Optional Parts

DMR-EX75EG/EC/EB
DMR-EX85EG/EB
POWER
SCHEMATIC DIAGRAM

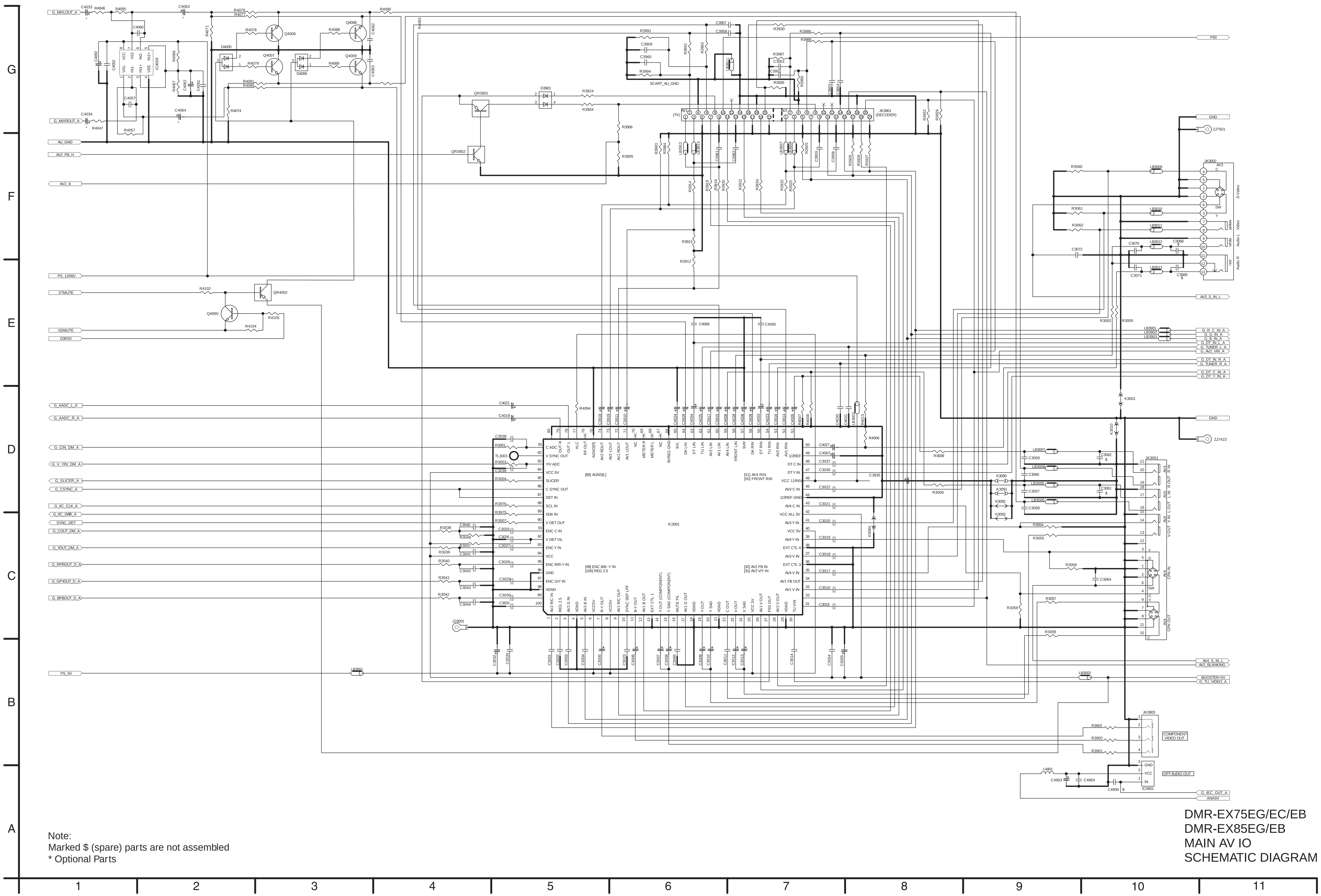
13.3. MAIN NET



Note:
Marked $ (spare) parts are not assembled
* Optional Parts

DMR-EX75EG/EC/EB
DMR-EX85EG/EB
MAIN NET
SCHEMATIC DIAGRAM

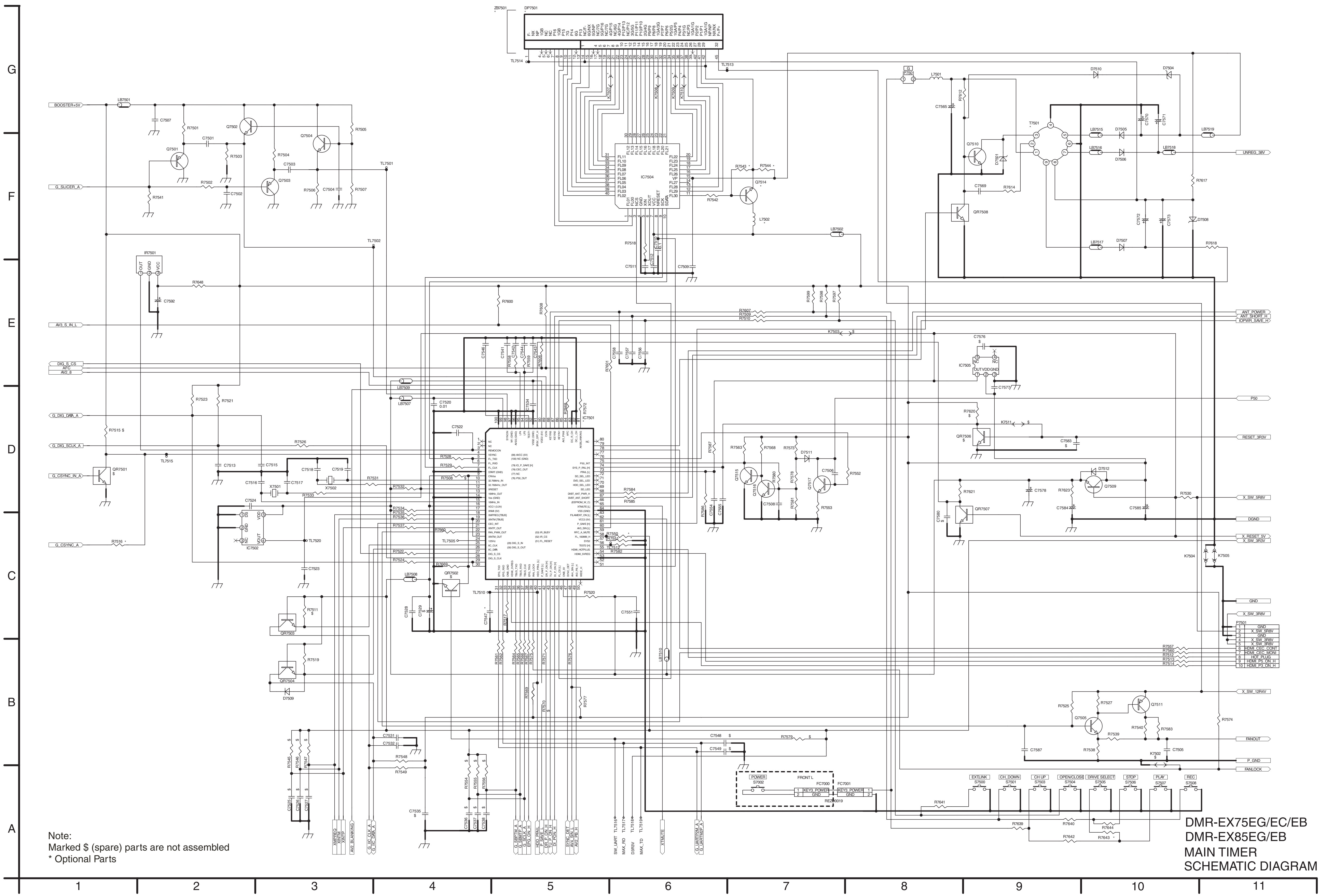
13.4. MAIN AV IO



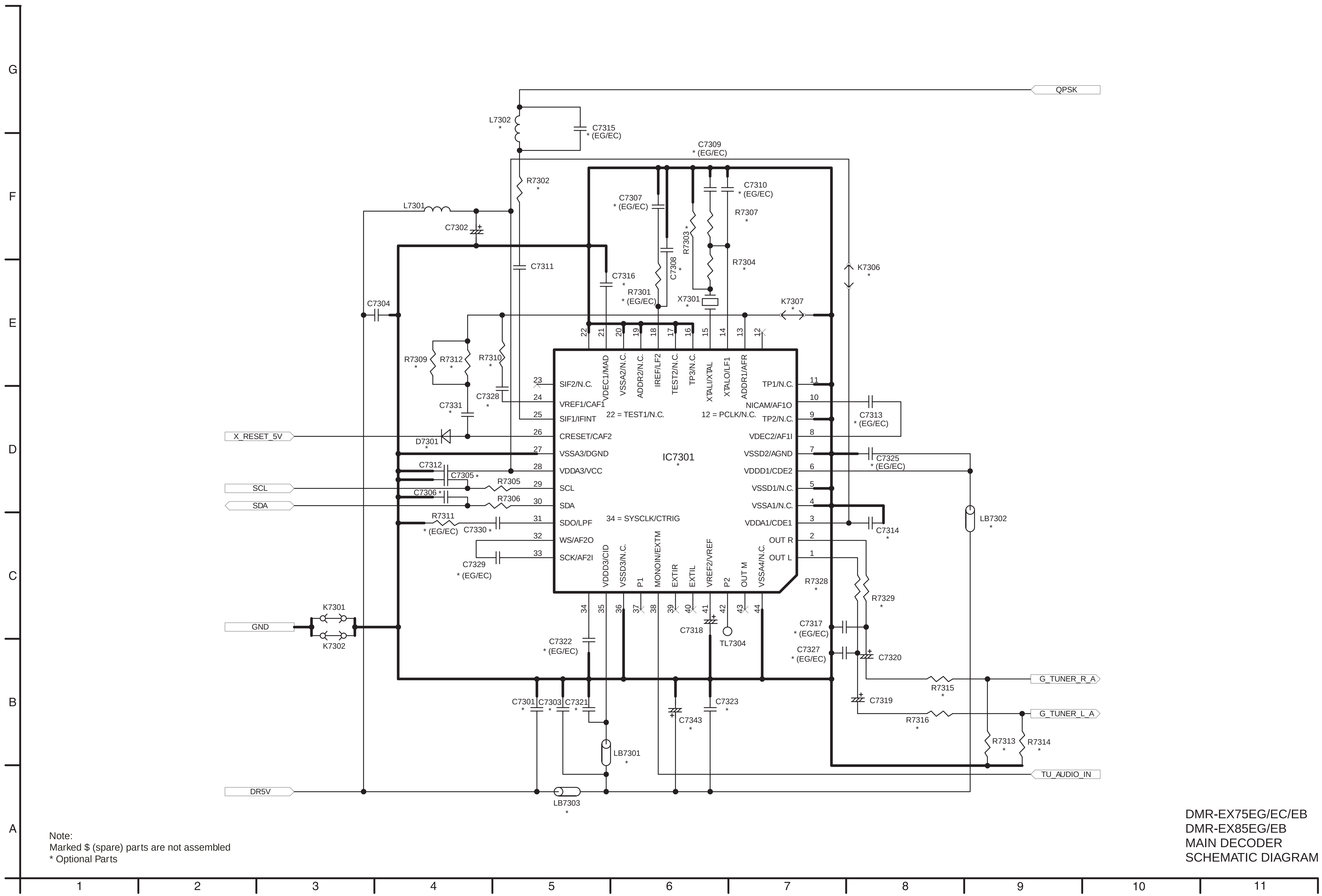
Note:
Marked $ (spare) parts are not assembled
* Optional Parts

DMR-EX75EG/EC/EB
DMR-EX85EG/EB
MAIN AV IO
SCHEMATIC DIAGRAM

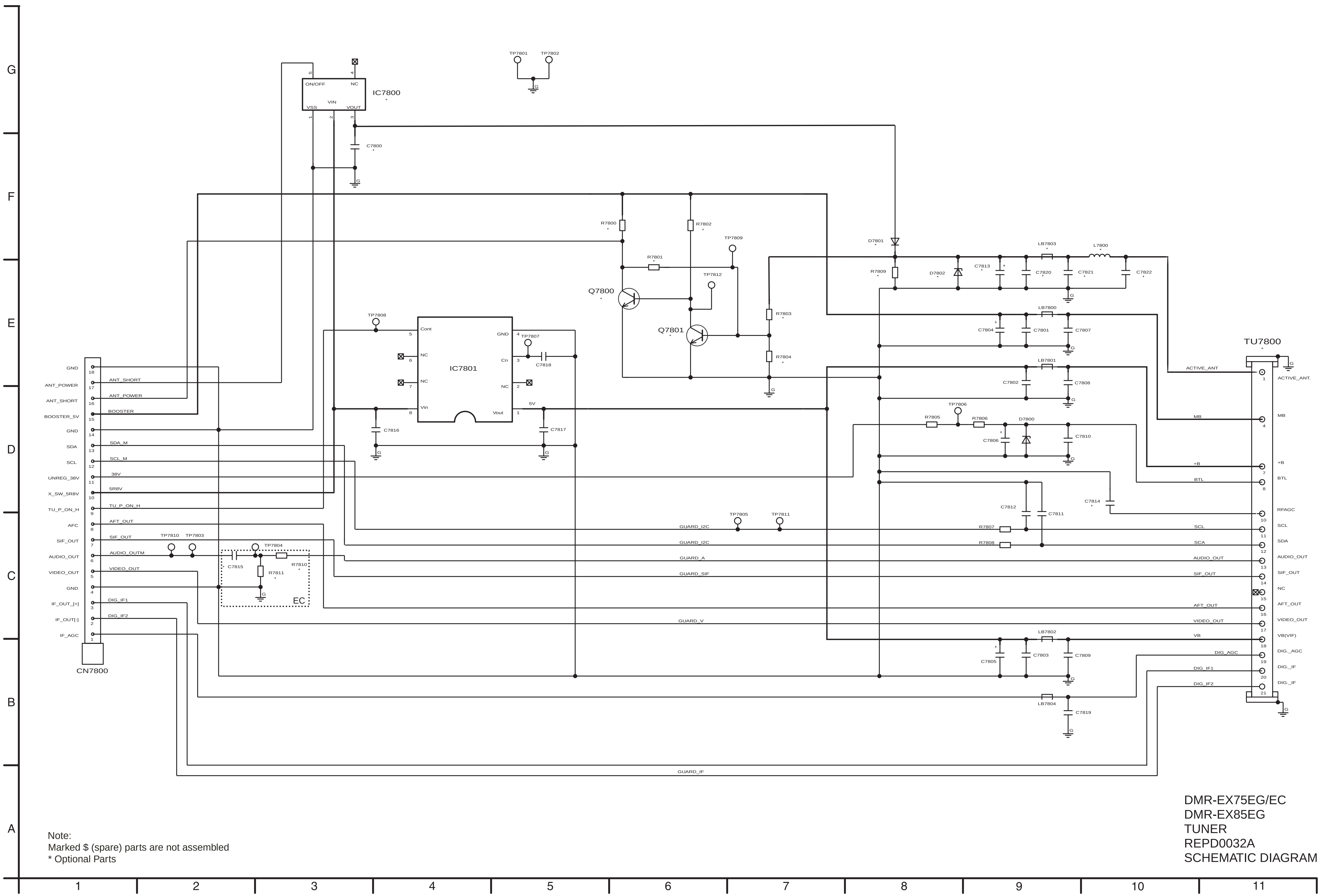
13.5. MAIN TIMER



13.6. MAIN NICAM

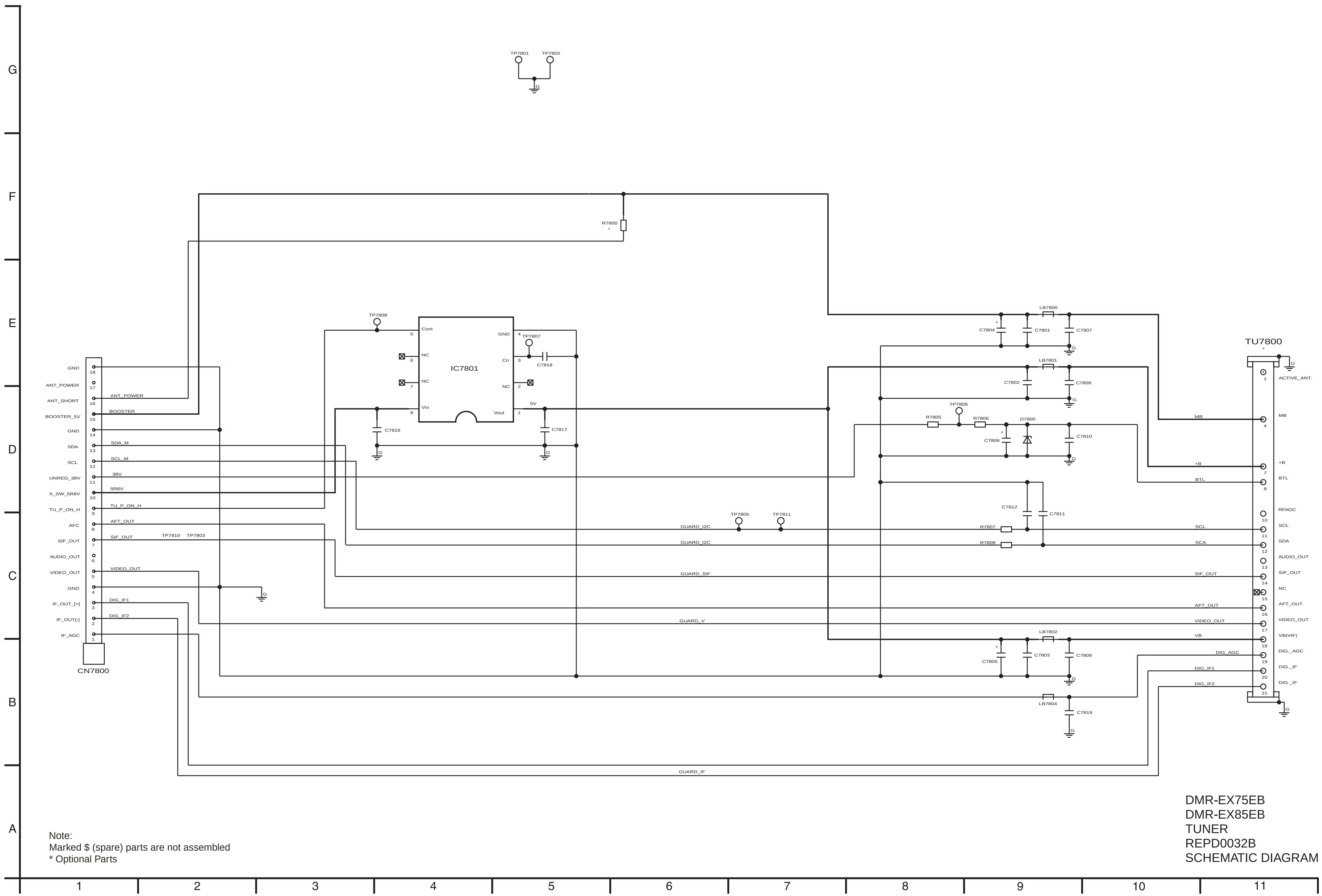


13.7. TUNER (REPD0032A)



Note:
Marked $ (spare) parts are not assembled
* Optional Parts

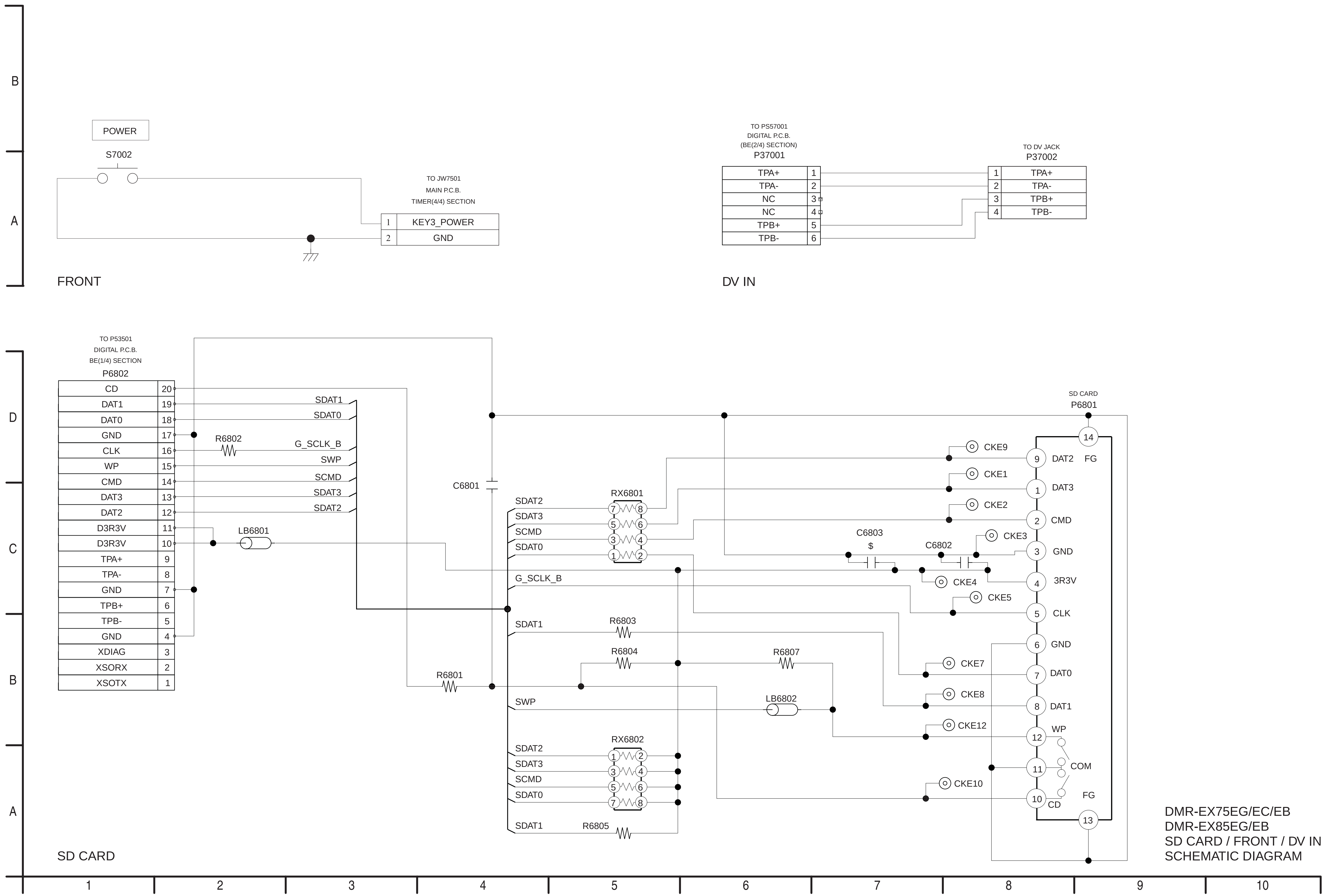
13.8. TUNER (REPD0032B)



Note:
Marked $ (spare) parts are not assembled
* Optional Parts

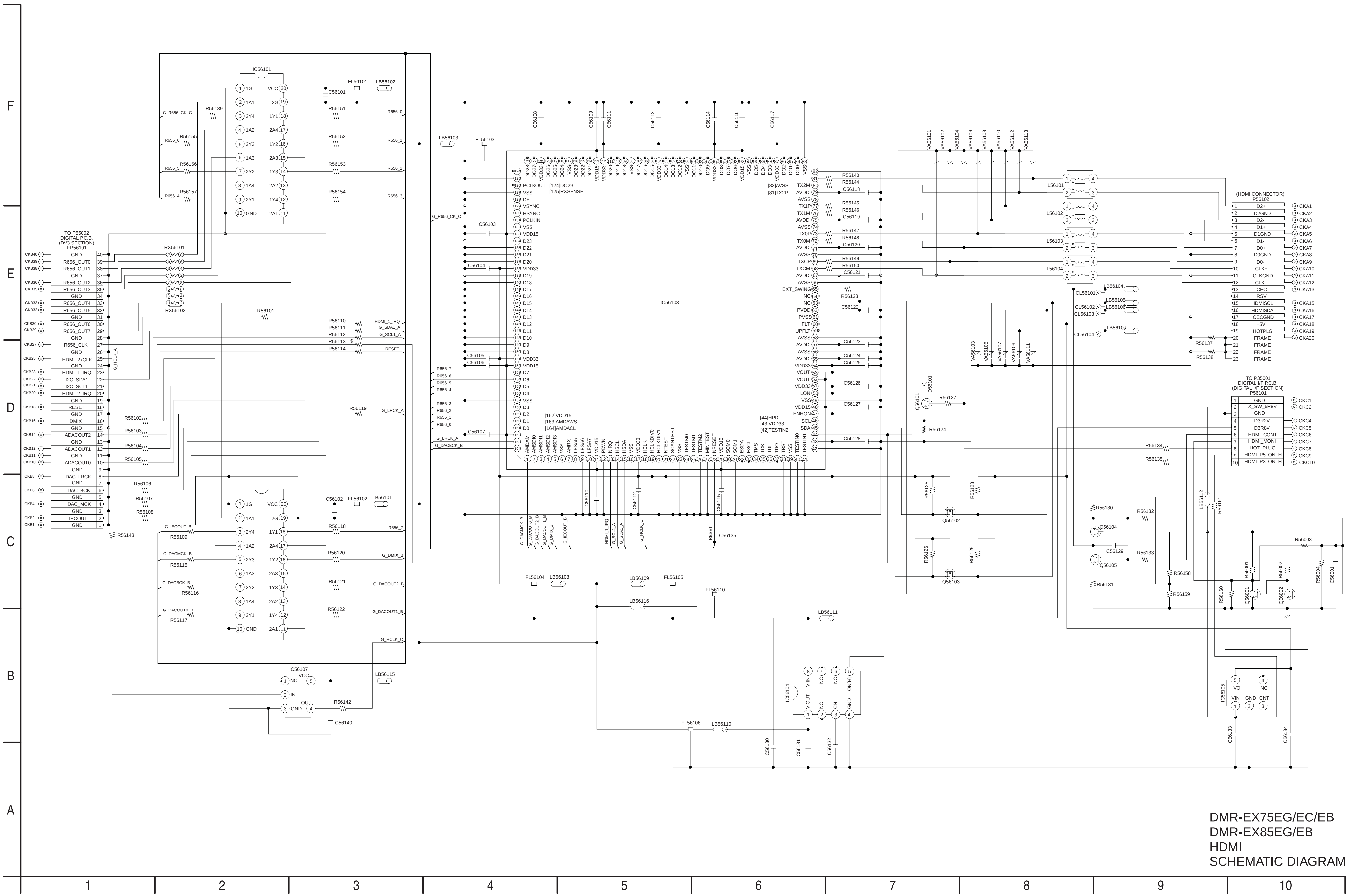
DMR-EX75EB
DMR-EX85EB
TUNER
REPD0032B
SCHEMATIC DIAGRAM

13.9. SD CARD / FRONT / DV IN



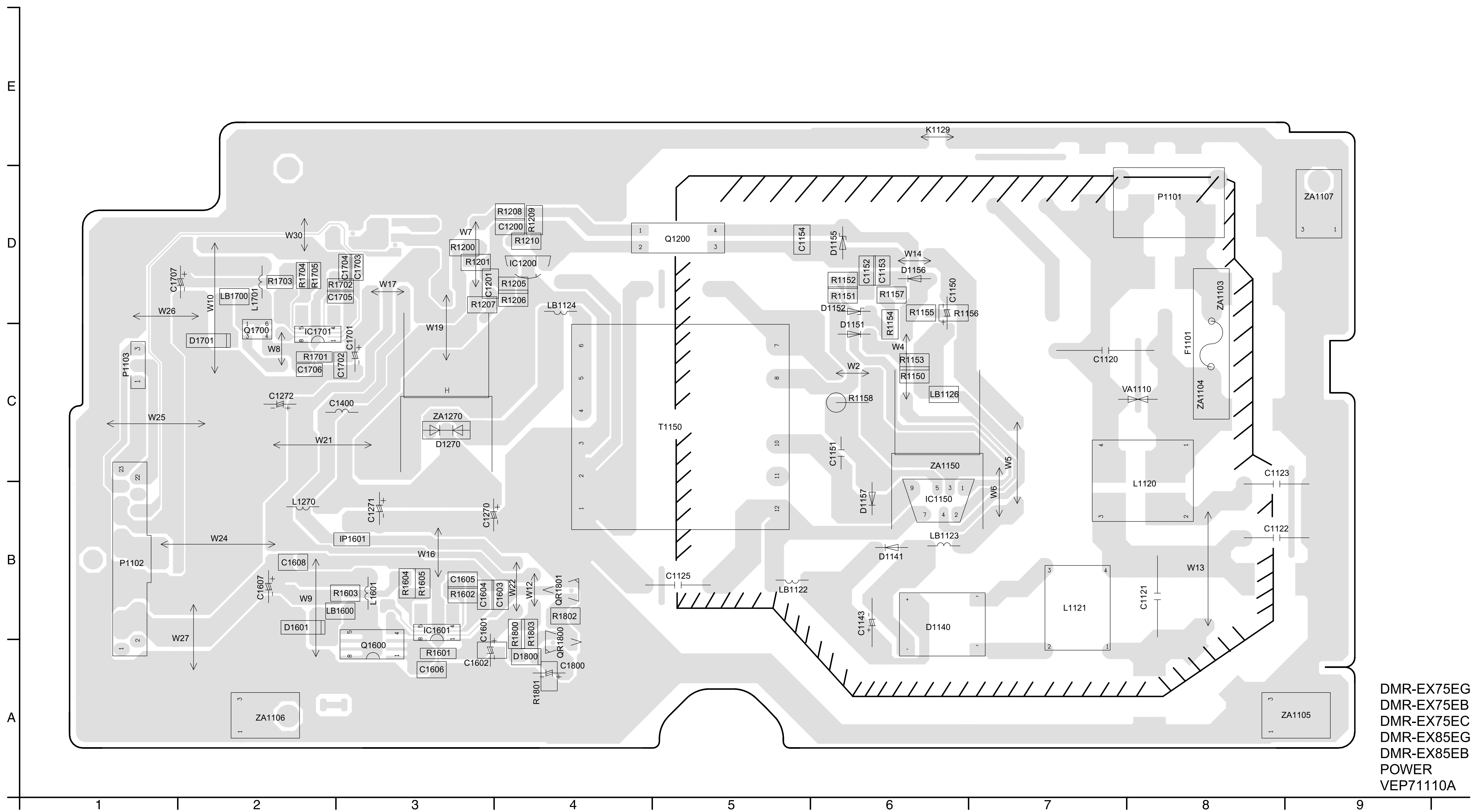
DMR-EX75EG/EC/EB
DMR-EX85EG/EB
SD CARD / FRONT / DV IN
SCHEMATIC DIAGRAM

13.10. HDMI


IC56101
IC56103
IC56107
IC56104
IC56105
TO P55002
DIGITAL P.C.B.
(DV3 SECTION)
FP56101
(HDMI CONNECTOR)
P56102
TO P35001
DIGITAL I/F P.C.B.
(DIGITAL I/F SECTION)
P56101
Q56101
Q56102
Q56103
Q56104
Q56105
Q56001
Q56002
D56101
DMR-EX75EG/EC/EB
DMR-EX85EG/EB
HDMI
SCHEMATIC DIAGRAM

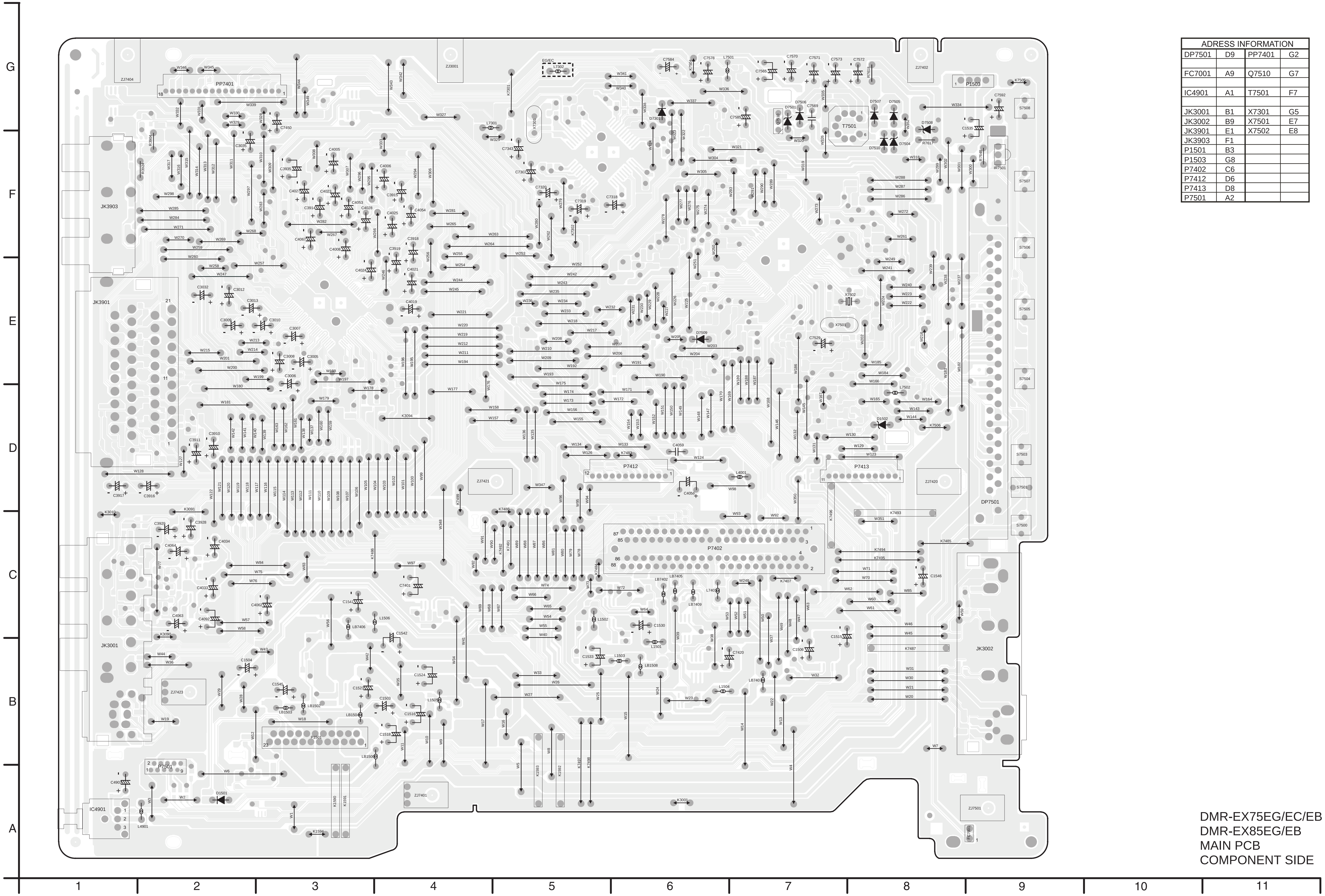
14 PRINTED CIRCUIT BOARD

14.1. POWER P.C.B.



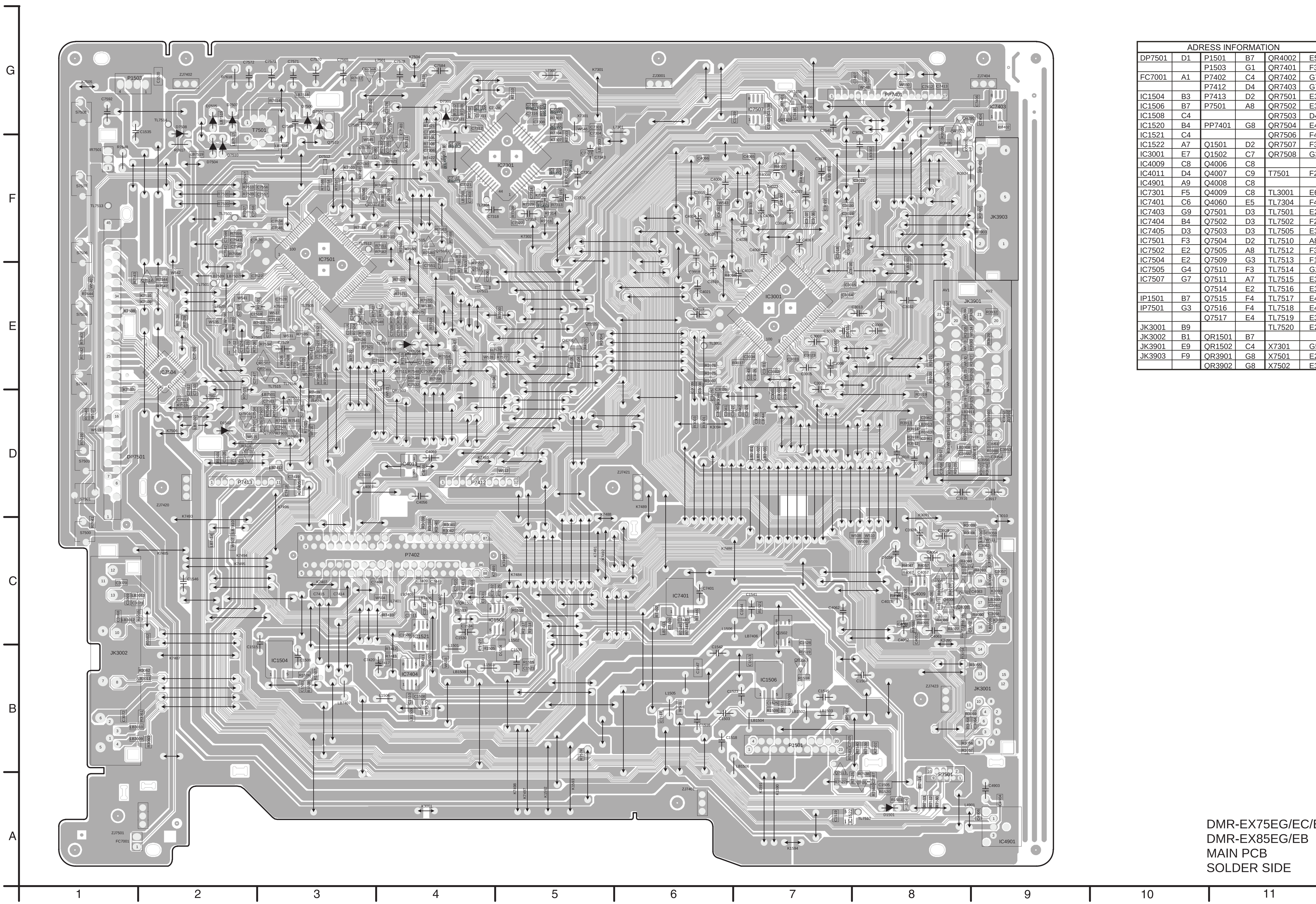
DMR-EX75EG
DMR-EX75EB
DMR-EX75EC
DMR-EX85EG
DMR-EX85EB
POWER
VEP71110A

14.2. MAIN P.C.B.



ADRESS INFORMATION			
DP7501	D9	PP7401	G2
FC7001	A9	Q7510	G7
IC4901	A1	T7501	F7
JK3001	B1	X7301	G5
JK3002	B9	X7501	E7
JK3901	E1	X7502	E8
JK3903	F1		
P1501	B3		
P1503	G8		
P7402	C6		
P7412	D6		
P7413	D8		
P7501	A2		

DMR-EX75EG/EC/EB
DMR-EX85EG/EB
MAIN PCB
COMPONENT SIDE



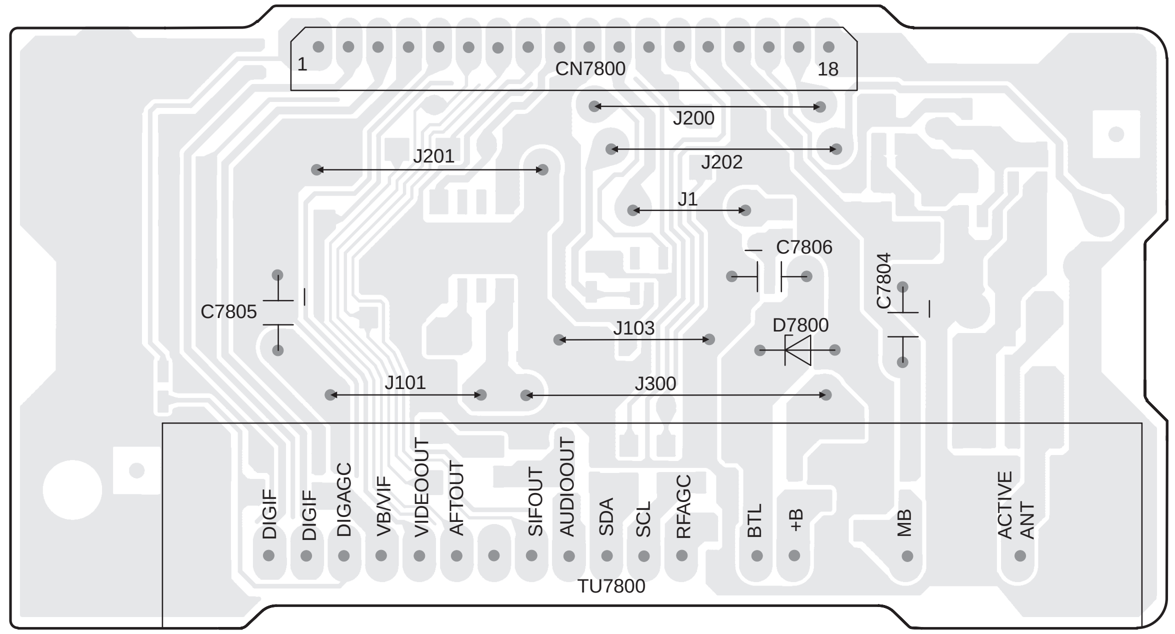
ADRESS INFORMATION					
DP7501	D1	P1501	B7	QR4002	E5
		P1503	G1	QR7401	F3
FC7001	A1	P7402	C4	QR7402	G7
		P7412	D4	QR7403	G7
IC1504	B3	P7413	D2	QR7501	E3
IC1506	B7	P7501	A8	QR7502	E3
IC1508	C4			QR7503	D4
IC1520	B4	PP7401	G8	QR7504	E4
IC1521	C4			QR7506	F4
IC1522	A7	Q1501	D2	QR7507	F3
IC3001	E7	Q1502	C7	QR7508	G3
IC4009	C8	Q4006	C8		
IC4011	D4	Q4007	C9	T7501	F2
IC4901	A9	Q4008	C8		
IC7301	F5	Q4009	C8	TL3001	E6
IC7401	C6	Q4060	E5	TL7304	F4
IC7403	G9	Q7501	D3	TL7501	E2
IC7404	B4	Q7502	D3	TL7502	F2
IC7405	D3	Q7503	D3	TL7505	E3
IC7501	F3	Q7504	D2	TL7510	A8
IC7502	E2	Q7505	A8	TL7512	F3
IC7504	E2	Q7509	G3	TL7513	F1
IC7505	G4	Q7510	F3	TL7514	G2
IC7507	G7	Q7511	A7	TL7515	E3
		Q7514	E2	TL7516	E3
IP1501	B7	Q7515	F4	TL7517	E4
IP7501	G3	Q7516	F4	TL7518	E4
		Q7517	E4	TL7519	E3
JK3001	B9			TL7520	E2
JK3002	B1	QR1501	B7		
JK3901	E9	QR1502	C4	X7301	G5
JK3903	F9	QR3901	G8	X7501	E2
		QR3902	G8	X7502	E3

DMR-EX75EG/EC/EB
DMR-EX85EG/EB
MAIN PCB
SOLDER SIDE

14.3. TUNER P.C.B. (REPD0032B)

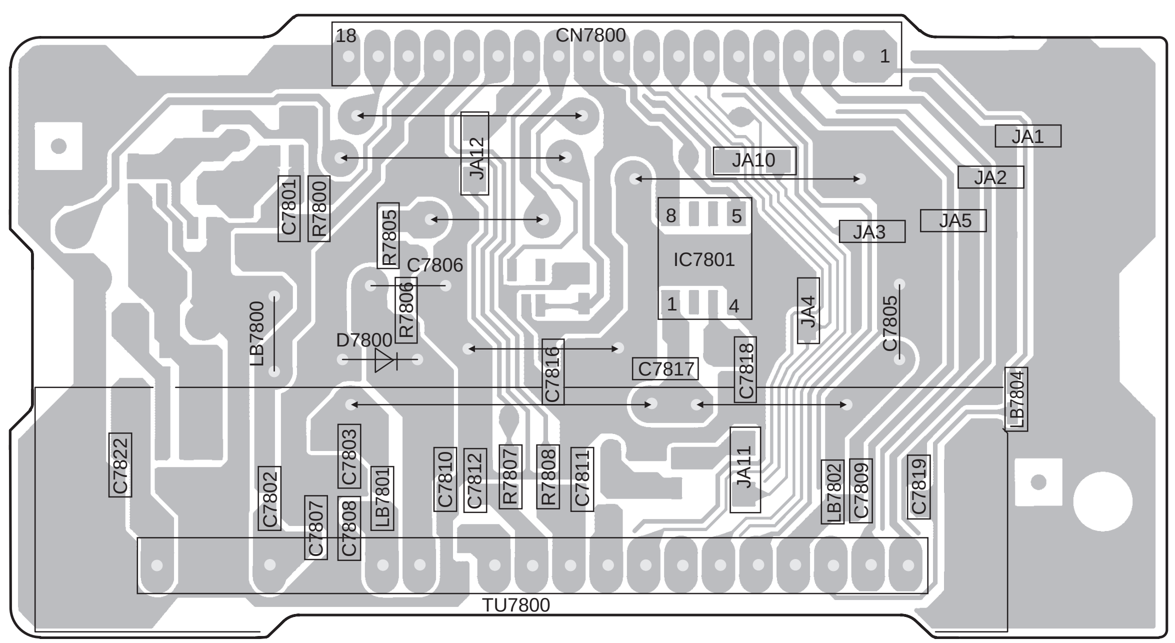
COMPONENT SIDE

ADDRESS INFORMATION	
CN7800	G5
TU7800	E5



SOLDER SIDE

ADDRESS INFORMATION	
IC7801	C6
CN7800	D5
TU7800	B5

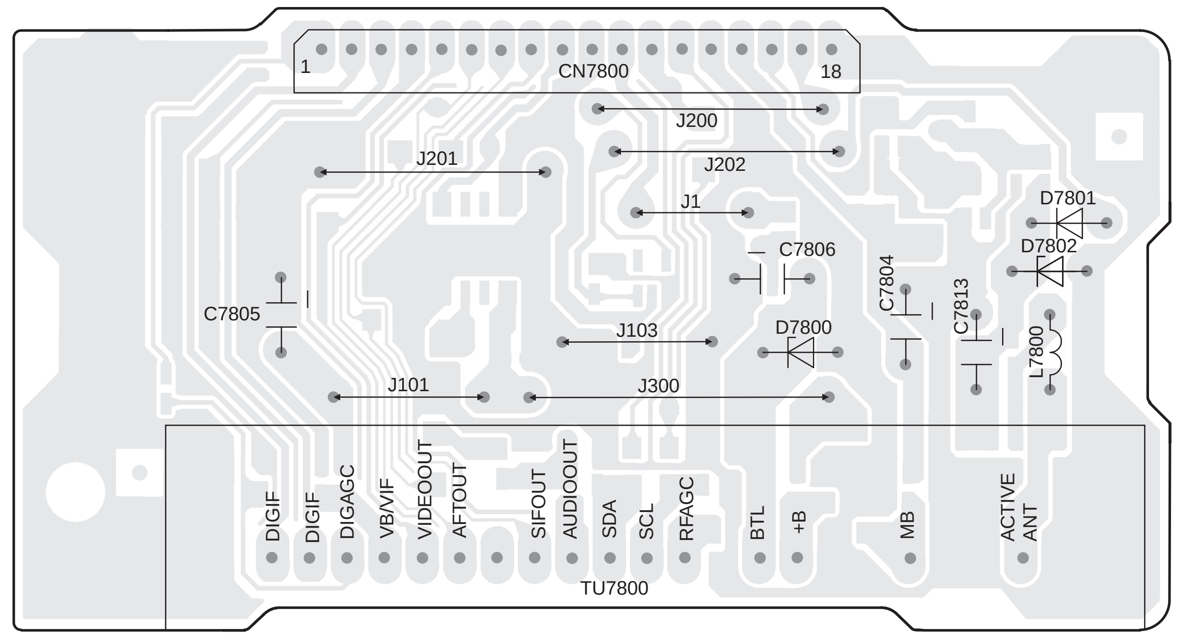


DMR-EX75EB
DMR-EX85EB
TUNER P.C.B.
REPD0032B
COMPONENT SIDE / SOLDER SIDE

14.4. TUNER P.C.B. (REPD0032A) / DV IN P.C.B. (VEP73135A)

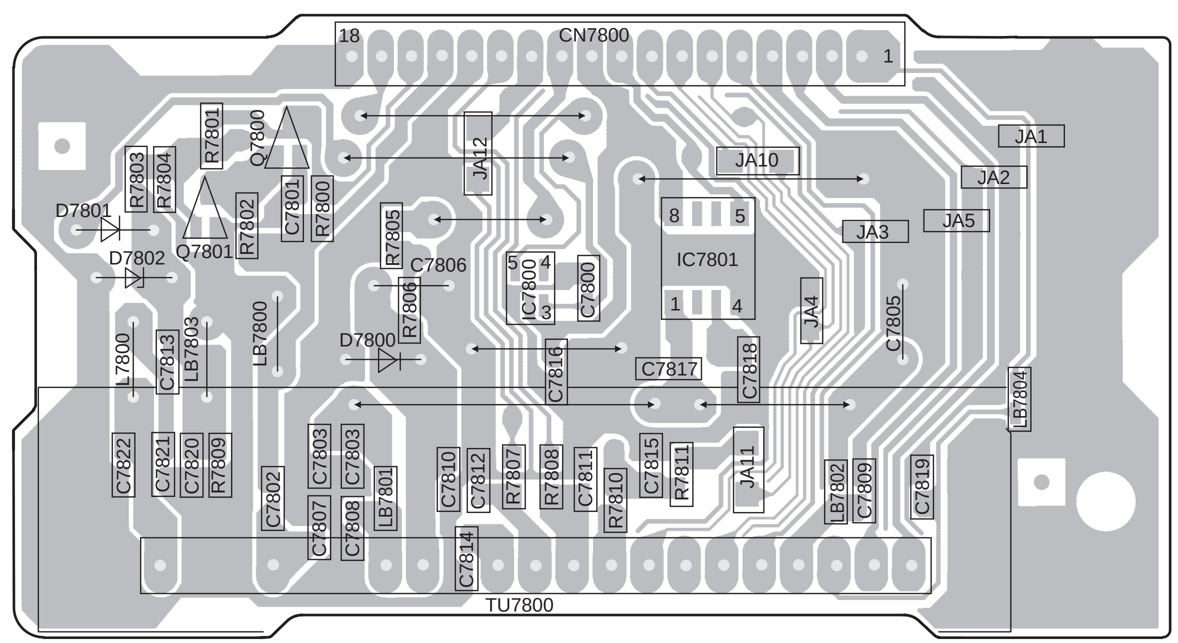
COMPONENT SIDE

ADDRESS INFORMATION	
CN7800	G5
TU7800	E5



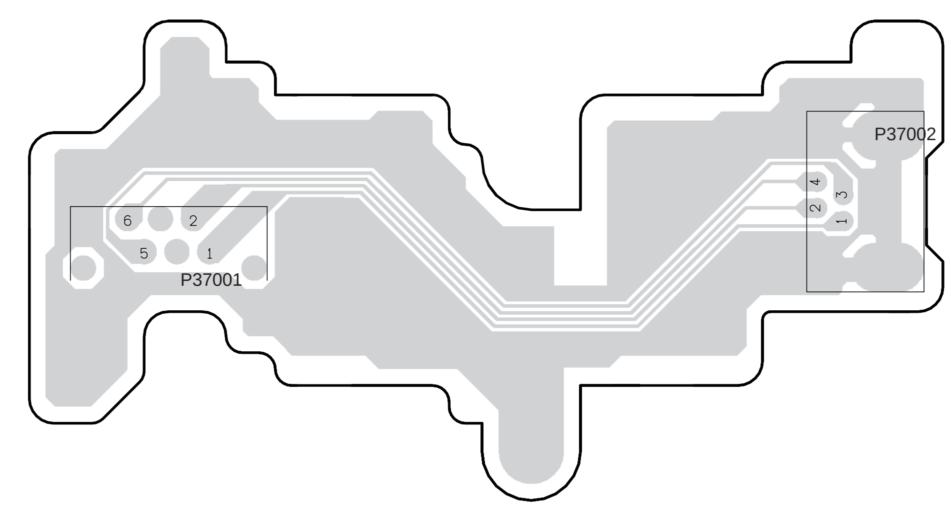
SOLDER SIDE

ADDRESS INFORMATION	
IC7800	C4
IC7801	C6
CN7800	D5
TU7800	B5



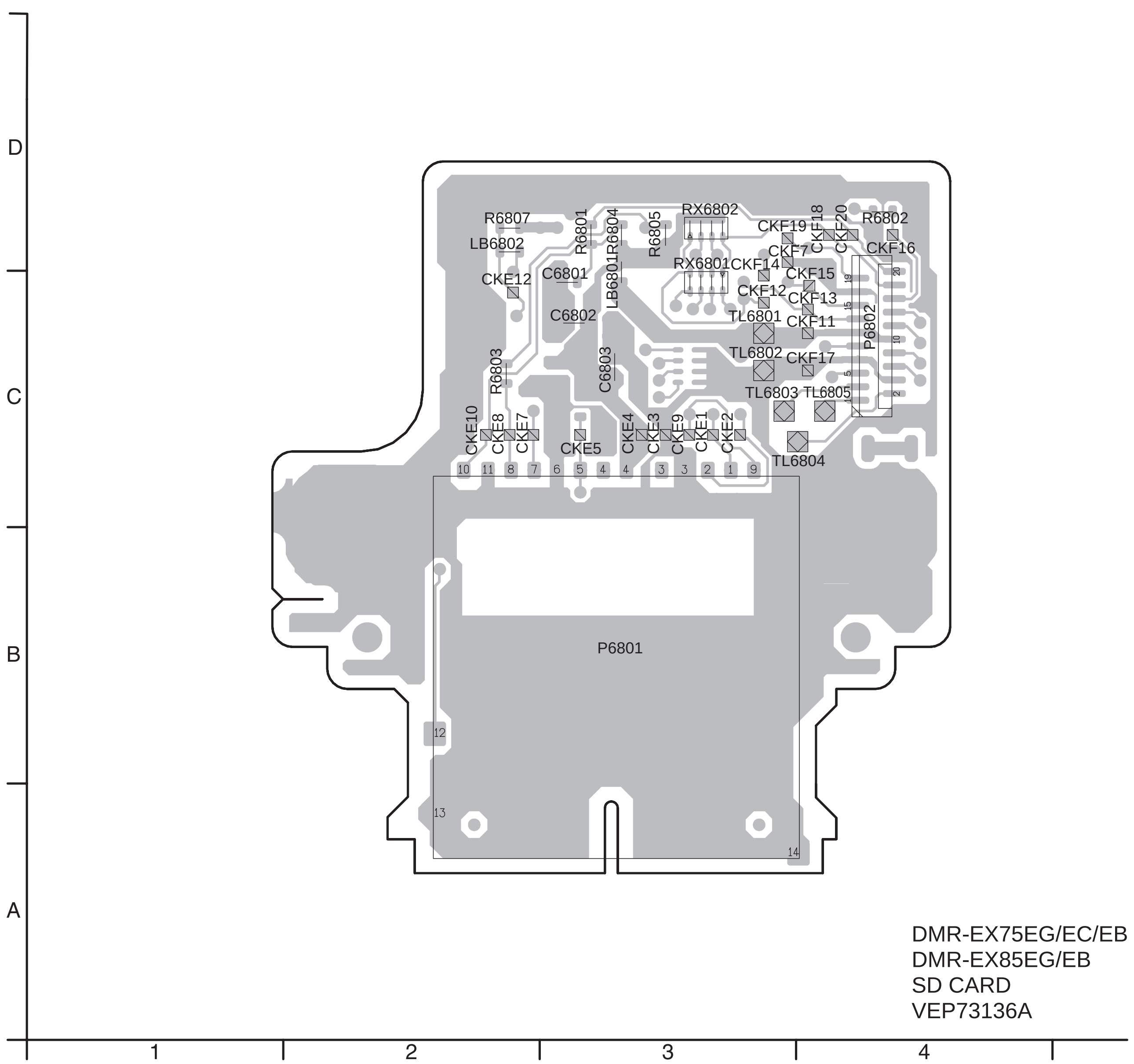
DMR-EX75EG/EC
DMR-EX85EG
TUNER P.C.B.
REPD0032A
COMPONENT SIDE / SOLDER SIDE

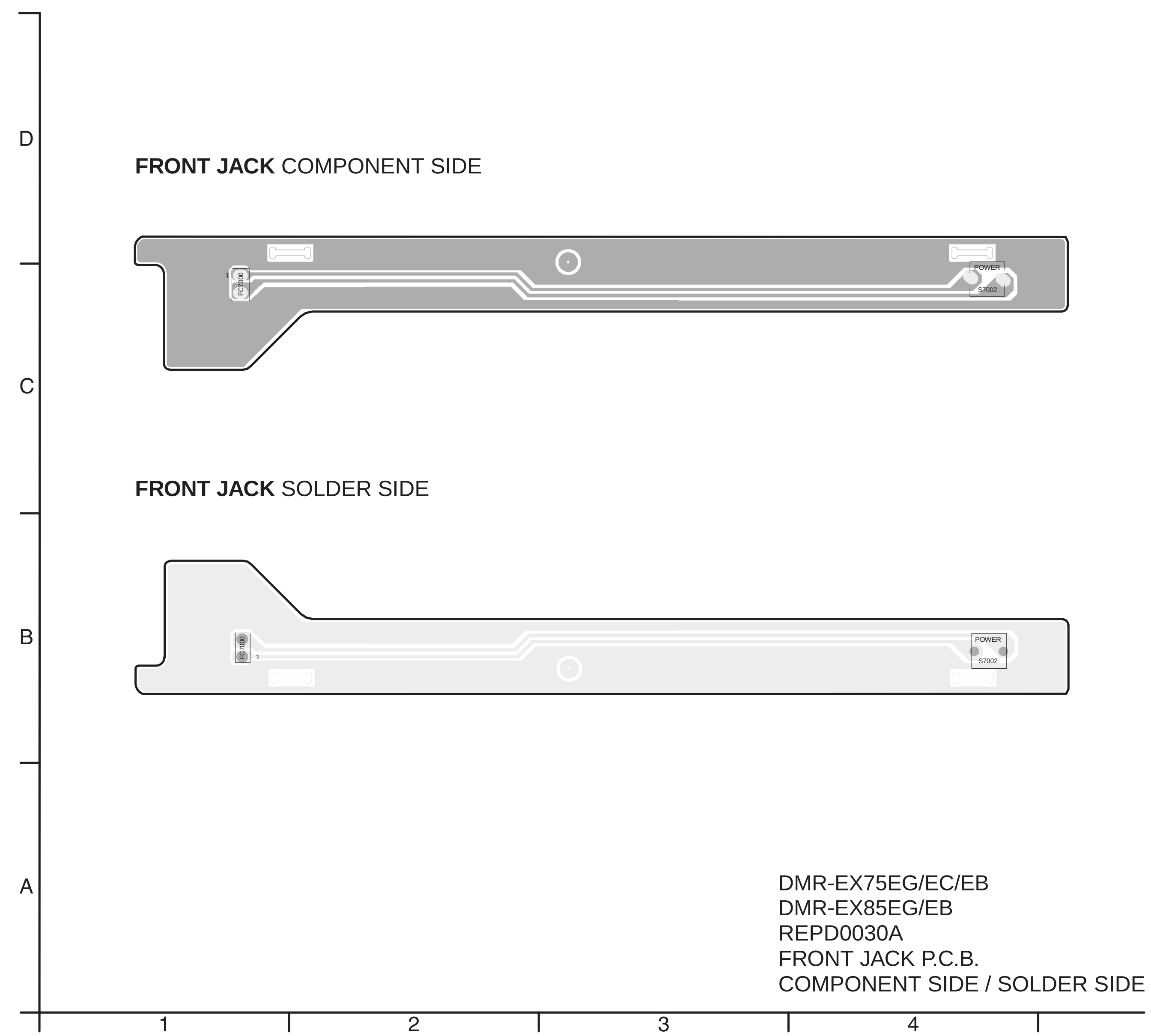
SOLDER SIDE



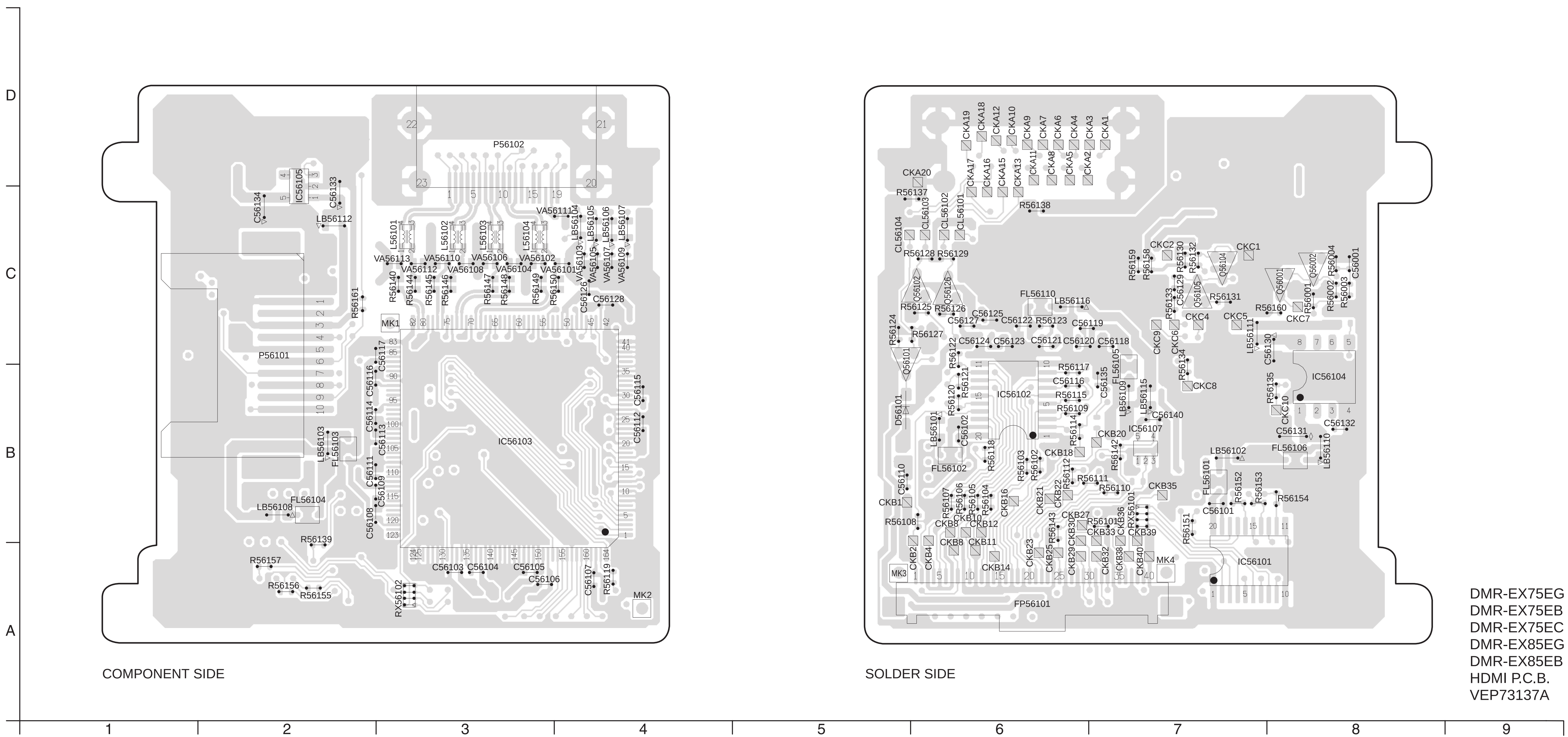
DMR-EX75EG/EC/EB
DMR-EX85EG/EB
DV IN P.C.B.
VEP73135A
SOLDER SIDE

14.5. SD CARD P.C.B. / FRONT P.C.B.





14.6. HDMI P.C.B.



COMPONENT SIDE

SOLDER SIDE

DMR-EX75EG
DMR-EX75EB
DMR-EX75EC
DMR-EX85EG
DMR-EX85EB
HDMI P.C.B.
VEP73137A

15 APPENDIX FOR SCHEMATIC DIAGRAM

15.1. VOLTAGE AND WAVEFORM CHART

Note:

Circuit voltage and waveform described, shall be regarded as reference information when probing defect point, because it may differ from an actual measuring value due to difference of Measuring instrument and its measuring condition and product itself.

15.1.1. VOLTAGE CHART

15.1.1.1. POWER P.C.B.

Ref No.	IC1150									IC1200		
MODE	1	2	3	4	5	6	7	8	9	1	2	3
REC	3.0	1.5	0	11.6	0	-	310	-	-1523	8.3	2.5	0
PLAY	3.0	1.5	0	11.6	0	-	310	-	-1523	8.3	2.5	0
STOP	3.0	1.5	0	11.6	0	-	310	-	-1538	8.3	2.5	0

Ref No.	IC1601								IC1701							
MODE	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
REC	12.3	4.5	1.2	1.3	0.8	0	7.6	12.3	12.4	4.5	1.2	1.3	0	0	8.5	12.4
PLAY	12.3	4.5	1.2	1.3	0.8	0	7.6	12.3	12.4	4.5	1.2	1.3	0	0	8.5	12.4
STOP	12.3	4.5	1.2	1.3	0.8	0	7.6	12.3	12.4	4.5	1.2	1.3	1.2	0	8.5	12.4

Ref No.	Q1200				Q1600							
MODE	1	2	3	4	1	2	3	4	5	6	7	8
REC	9.3	8.3	0	1.5	12.3	12.3	12.3	7.6	6.1	6.1	6.1	6.1
PLAY	9.3	8.3	0	1.5	12.3	12.3	12.3	7.6	6.1	6.1	6.1	6.1
STOP	9.3	8.3	0	1.5	12.3	12.3	12.3	7.6	6.1	6.1	6.1	6.1

Ref No.	QR1800			QR1801		
MODE	E	C	B	E	C	B
REC	11.9	0	12.3	0	4.5	0
PLAY	11.9	0	12.3	0	4.5	0
STOP	11.9	0	12.3	0	4.5	0

15.1.1.2. MAIN P.C.B. - PART 1

Ref No.	IC1505					IC1506				
MODE	1	2	3	4	5	1	2	3	4	5
REC	4.1	0	4.9	-	3.3	4.8	6.1	0	5.2	5.2
PLAY	4.1	0	4.9	-	3.3	4.8	6.1	0	5.2	5.2
STOP	4.1	0	4.9	-	3.3	4.8	6.1	0	5.2	5.2

Ref No.	IC1507								IC1510					IC1520				
MODE	1	2	3	4	5	6	7	8	1	2	3	4	5	1	2	3	4	5
REC	5.1	-	3.4	0	6.1	-	-	6.1	6.1	4.9	5.0	-	0	6.1	0	4.8	-	5.1
PLAY	5.1	-	3.4	0	6.1	-	-	6.1	6.1	4.9	5.0	-	0	6.1	0	4.8	-	5.1
STOP	5.1	-	3.4	0	6.1	-	-	6.1	6.1	4.9	5.0	-	0	6.1	0	4.8	-	5.1

Ref No.	IC1521								IC1522				
MODE	1	2	3	4	5	6	7	8	1	2	3	4	5
REC	3.3	-	2.0	0	4.8	-	-	4.1	-	0	0	5.0	5.1
PLAY	3.3	-	2.0	0	4.8	-	-	4.1	-	0	0	5.0	5.1
STOP	3.3	-	2.0	0	4.8	-	-	4.1	-	0	0	5.0	5.1

Ref No.	IC3001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	2.0	2.5	1.6	0	1.6	5.0	1.6	5.0	0.4	0.3	1.6	0.4	-	1.7	1.7	1.6	0.4	0	1.7	1.7
PLAY	2.0	2.5	1.6	0	1.6	5.0	1.6	5.0	0.4	0.3	1.6	0.4	-	1.7	1.7	1.6	0.4	0	1.7	1.7
STOP	2.0	2.5	1.6	0	1.6	5.0	1.6	5.0	0.4	1.6	1.6	0.4	-	1.7	1.7	1.6	0.4	0	1.7	1.7

Ref No.	IC3001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
REC	0	1.7	1.7	1.7	5.0	1.4	0.1	1.4	0	2.1	1.6	0	1.6	0	2.1	-	1.6	-	1.6	5.0
PLAY	0	1.7	1.7	1.7	5.0	1.4	0.1	1.4	0	2.1	1.6	0	1.6	0	2.1	-	1.6	-	1.6	5.0
STOP	0	1.7	1.6	1.7	5.0	1.4	0.2	1.4	0	2.1	1.6	0	1.6	0	2.1	-	1.6	-	1.6	5.0

Ref No.	IC3001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
REC	1.6	5.1	2.0	0	2.0	11.6	1.6	2.0	4.5	4.4	4.4	4.0	4.5	4.5	-	4.5	9.1	4.4	4.4	4.5
PLAY	1.6	5.1	2.0	0	2.0	11.6	1.6	2.0	4.5	4.4	4.4	4.0	4.5	4.5	-	4.5	9.1	4.4	4.4	4.5
STOP	1.6	5.1	2.0	0	2.0	11.6	1.6	2.0	4.5	4.5	4.0	4.5	4.5	4.4	-	3.9	9.1	4.0	4.3	3.7

Ref No.	IC3001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
REC	4.5	4.5	-	4.5	9.0	0	0	0	0	0	4.5	4.5	4.5	4.5	0	-	9.5	4.5	4.5	0
PLAY	4.5	4.5	-	4.5	9.0	0	0	0	0	0	4.5	4.5	4.5	4.5	0	-	9.5	4.5	4.5	0
STOP	3.7	3.7	-	3.8	9.0	0	0	0	0	0	4.5	4.5	4.5	4.5	0	-	0.3	4.5	4.5	0

Ref No.	IC3001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
REC	2.1	5.0	1.5	5.1	2.1	4.5	3.6	4.8	4.6	5.0	2.0	2.8	2.1	5.1	2.0	0	2.1	0	2.0	2.5
PLAY	2.1	5.0	1.5	5.1	2.1	4.5	3.6	4.8	4.6	5.0	2.0	2.8	2.1	5.1	2.0	0	2.1	0	2.0	2.5
STOP	4.7	5.0	1.5	5.1	2.1	4.5	3.6	4.8	4.6	5.1	5.0	2.8	2.1	5.1	2.0	0	2.1	0	2.0	2.5

15.1.1.3. MAIN P.C.B. - PART 2

Ref No.	IC4009									IC4011										
MODE	1	2	3	4	5	6	7	8		1	2	3	4	5						
REC	5.8	5.8	5.8	0	5.8	5.8	5.8	11.6		3.4	0	4.8	6.1	5.0						
PLAY	5.8	5.8	5.8	0	5.8	5.8	5.8	11.6		3.4	0	4.8	6.1	5.0						
STOP	5.8	5.8	5.8	0	5.8	5.8	5.8	11.6		3.4	0	4.8	6.1	5.0						
Ref No.	IC4012									IC4901										
MODE	1	2	3	4	5	6	7	8		1	2	3								
REC	5.8	5.8	5.8	0	5.8	5.8	5.8	11.6		1.7	5.0	0								
PLAY	5.8	5.8	5.8	0	5.8	5.8	5.8	11.6		1.7	5.0	0								
STOP	5.8	5.8	5.8	0	5.8	5.8	5.8	11.6		1.7	5.0	0								
Ref No.	IC7301																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	2.4	2.4	2.4	0	0	2.4	0	2.4	0	2.4	0	-	0	2.9	2.6	0	0	2.8	0	0
PLAY	2.4	2.4	2.4	0	0	2.4	0	2.4	0	2.4	0	-	0	2.9	2.6	0	0	2.8	0	0
STOP	2.4	2.4	2.4	0	0	2.4	0	2.4	0	2.4	0	-	0	2.9	2.6	0	0	2.8	0	0
Ref No.	IC7301																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
REC	2.3	0	-	1.5	2.4	1.4	0	5.0	5.0	5.0	2.9	2.4	2.4	2.5	2.5	0	-	2.4	-	-
PLAY	2.3	0	-	1.5	2.4	1.4	0	5.0	5.0	5.0	2.9	2.4	2.4	2.5	2.5	0	-	2.4	-	-
STOP	2.3	0	-	1.5	2.4	1.4	0	5.0	5.0	5.0	2.9	2.4	2.4	2.5	2.5	0	-	2.4	-	-
Ref No.	IC7301																			
MODE	41	42	43	44																
REC	2.4	-	-	0																
PLAY	2.4	-	-	0																
STOP	2.4	-	-	0																
Ref No.	IC7302				IC7401						IC7402									
MODE	1	2	3		1	2	3	4	5		1	2	3	4	5					
REC	5.0	0	4.9		12.4	4.2	11.6	2.6	0		6.1	0	6.1	-	5.1					
PLAY	5.0	0	4.9		12.4	4.2	11.6	2.6	0		6.1	0	6.1	-	5.1					
STOP	5.0	0	4.9		12.4	4.2	11.6	2.6	0		6.1	0	6.1	-	5.1					
Ref No.	IC7403									IC7404										
MODE	1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8			
REC	5.0	-	3.4	0	4.2	-	-	6.1		0	0	0	0	3.2	3.2	0	3.3			
PLAY	5.0	-	3.4	0	4.2	-	-	6.1		0	0	0	0	3.2	3.2	0	3.3			
STOP	5.0	-	3.4	0	4.2	-	-	6.1		0	0	0	0	3.2	3.2	0	3.3			
Ref No.	IC7501																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	0.3	-	4.9	3.8	0.8	0.8	4.4	0	0	2.1	1.2	4.9	1.4	0	2.1	3.3	4.9	3.3	3.2	-
PLAY	0.3	-	4.9	3.8	0.8	0.8	4.4	0	0	0.7	1.2	4.9	1.4	0	2.1	3.3	4.9	3.3	3.2	-
STOP	0.3	-	4.9	4.5	0.9	0.9	4.4	0	0	0.7	1.2	4.9	1.4	0	2.1	3.3	4.9	3.3	3.2	-
Ref No.	IC7501																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
REC	3.1	-	3.2	0	-	-	-	-	4.8	4.6	3.3	3.3	0	-	3.3	3.2	3.3	-	0	4.9
PLAY	3.1	-	3.2	0	-	-	-	-	4.8	4.6	3.3	3.3	0	-	3.3	3.2	3.3	-	0	4.9
STOP	3.1	-	3.2	0	-	-	-	-	4.8	4.6	3.3	3.3	0	-	3.3	3.2	3.3	-	0	4.9
Ref No.	IC7501																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
REC	0	4.9	4.9	4.8	0	4.9	5.0	5.0	4.9	0	4.9	-	0	-	-0.1	0	0	0	-	5.0
PLAY	0	4.9	4.9	4.8	0	4.9	5.0	5.0	4.9	0	4.9	-	0	-	-0.1	0	0	0	-	5.0
STOP	4.9	4.9	4.9	4.8	0	4.9	5.0	5.0	4.9	0	4.9	-	0	-	-0.1	0	0	0	-	5.0
Ref No.	IC7501																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
REC	0	5.0	0	0	4.9	-	-	-	-	-	-	-	4.9	0	5.0	0	-	-	0	-
PLAY	0	5.0	0	0	4.9	-	-	-	-	-	-	-	4.9	0	5.0	0	-	-	0	-
STOP	0	5.0	0	0	4.9	-	-	-	-	-	-	-	4.9	0	5.0	0	-	-	0	-
Ref No.	IC7501																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
REC	3.3	0	0	4.7	3.2	5.0	5.0	5.0	2.0	5.0	0	0	2.5	1.2	1.6	0	0	2.0	5.0	0
PLAY	3.3	0	0	4.7	3.2	5.0	5.0	5.0	2.0	5.0	0	0	2.5	1.2	1.6	0	0	2.0	5.0	0
STOP	3.3	0	0	4.7	0	5.0	5.0	5.0	2.0	5.0	0	0	2.5	1.2	1.6	0	0	2.0	5.0	0
Ref No.	IC7502																			
MODE	1	2	3	4	5															
REC	0	0	-	4.9	5.0															
PLAY	0	0	-	4.9	5.0															
STOP	0	0	-	4.9	5.0															
Ref No.	IC7504																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	-	-	0	0	2.2	2.2	5.0	4.9	4.4	2.5	-18.1	-21.1	-21.1	-	-21.8	-21.1	-	-17.6	-17.6	-18.1
PLAY	-	-	0	0	2.2	2.2	5.0	4.9	4.4	2.5	-18.1	-17.6	-17.6	-	-21.8	-17.6	-	-21.1	-21.1	-18.1
STOP	-	-	0	0	2.2	2.2	5.0	4.9	4.4	0.8	-18.1	-21.1	-21.1	-	-21.8	-21.1	-	-17.6	-17.6	-18.1
Ref No.	IC7504																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
REC	-17.6	-14.2	-18.1	-14.2	-21.0	-17.7	-21.0	-10.8	-17.7	-17.6	-17.6	-17.6	-17.7	-17.6	-17.7	-17.9	-17.9	-	-	-
PLAY	-17.6	-0.6	-18.1	-4.0	-14.3	-17.7	-10.8	-4.0	-17.7	-10.8	-21.1	-21.1	-17.7	-21.4	-17.7	-4.4	-4.4	-	-	-
STOP	-17.6	-14.2	-18.1	-14.2	-21.0	-17.7	-21.0	-10.8	-17.7	-17.6	-17.6	-17.6	-17.7	-17.6	-17.7	-17.9	-17.9	-	-	-
Ref No.	IC7505						IC7507													
MODE	1	2	3	4	5		1	2	3	4	5	6	7	8						
REC	4.9	5.1	0	-	-		5.7	1.3	1.3	0	0.2	0.3	11.2	12.3						
PLAY	4.9	5.1	0	-	-		5.7	1.3	1.3	0	0.2	0.3	11.2	12.3						
STOP	4.9	5.1	0	-	-		5.7	1.3	1.3	0	0.3	0.2	11.2	12.3						

15.1.1.4. MAIN P.C.B. - PART 3

Ref No.	Q1501									Q1509										
MODE	1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8			
REC	5.2	5.2	5.2	0.6	5.1	5.1	5.1	5.1		12.4	12.4	12.4	6.2	12.3	12.3	12.3	12.3			
PLAY	5.2	5.2	5.2	0.6	5.1	5.1	5.1	5.1		12.4	12.4	12.4	6.2	12.3	12.3	12.3	12.3			
STOP	5.2	5.2	5.2	0.6	5.1	5.1	5.1	5.1		12.4	12.4	12.4	6.2	12.3	12.3	12.3	12.3			
Ref No.	Q4006				Q4007				Q4008				Q4009				Q7401			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
REC	0	0	-0.1		0	0	-0.1		0	0	-0.1		0	0	-0.1		0	11.6	0	
PLAY	0	0	-0.1		0	0	-0.1		0	0	-0.1		0	0	-0.1		0	11.6	0	
STOP	0	0	-0.1		0	0	-0.1		0	0	-0.1		0	0	-0.1		0	11.6	0	
Ref No.	Q7402				Q7501				Q7502				Q7503				Q7504			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
REC	0	0	4.9		2.7	0	2.1		2.0	5.0	1.6		2.7	0	2.1		2.0	5.0	1.6	
PLAY	0	0	4.9		2.7	0	2.1		2.0	5.0	1.6		2.7	0	2.1		2.0	5.0	1.6	
STOP	0	0	4.9		2.7	0	2.1		2.0	5.0	1.6		2.7	0	2.1		2.0	5.0	1.6	
Ref No.	Q7505				Q7506				Q7507				Q7508				Q7510			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
REC	-18.1	5.0	-18.0		0	5.0	0		0	0	4.6		0	4.6	0		0	9.1	-0.2	
PLAY	-18.1	5.0	-18.0		0	5.0	0		0	0	4.6		0	4.6	0		0	9.3	-0.1	
STOP	-18.1	5.0	-18.0		0	5.0	0		0	0	5.1		0	5.1	0.1		0	9.1	-0.2	
Ref No.	Q7511																			
MODE	E	C	B																	
REC	5.1	12.3	5.5																	
PLAY	5.1	12.3	5.5																	
STOP	5.1	12.3	5.5																	
Ref No.	QR1501				QR1503				QR4002				QR4003				QR4004			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
REC	0	0	4.9		0	0	4.9		5.1	-0.1	5.1		0	0	2.3		0	5.1	0	
PLAY	0	0	4.9		0	0	4.9		5.1	-0.1	5.1		0	0	2.3		0	5.1	0	
STOP	0	0	4.9		0	0	4.9		5.1	-0.1	5.1		0	0	2.3		0	5.1	0	
Ref No.	QR7401				QR7402				QR7403				QR7404							
MODE	E	C	B		E	C	B		E	C	B		E	C	B					
REC	0	4.2	0		38.1	38.0	0		0	0	4.9		0	0	0					
PLAY	0	4.2	0		38.1	38.0	0		0	0	4.9		0	0	0					
STOP	0	4.2	0		38.1	38.0	0		0	0	4.9		0	0	0					
Ref No.	QR7507				QR7508															
MODE	E	C	B		E	C	B													
REC	0	0	4.9		0	-0.2	0													
PLAY	0	0	4.9		0	-0.1	0													
STOP	0	0	4.9		0	-0.2	0													

15.1.1.5. TUNER P.C.B.

Ref No.	Q7802																			
MODE	E	C	B																	
REC	3.8	1.2	3.1																	
PLAY	3.8	1.2	3.1																	
STOP	3.8	1.2	3.1																	

15.1.1.6. P59001 CONNECTOR

Ref No.	P59001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	0	0	0	0	0	0	0	0	0	0	0	0	3.3	12.3	4.9	12.3	3.3	0	4.9	0
PLAY	0	0	0	0	0	0	0	0	0	0	0	0	3.3	12.3	4.9	12.3	3.3	0	4.9	0
STOP	0	0	0	0	0	0	0	0	0	0	0	0	3.3	12.3	4.9	12.3	3.3	0	4.9	0

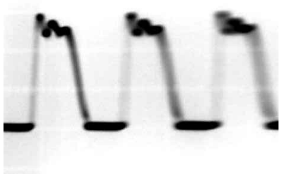
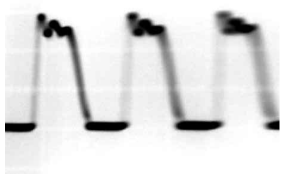
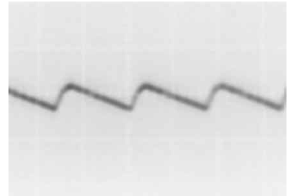
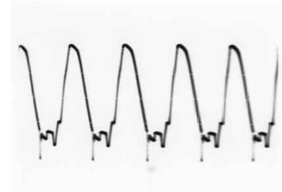
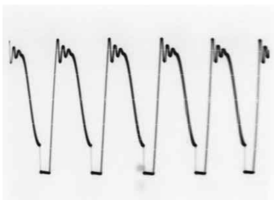
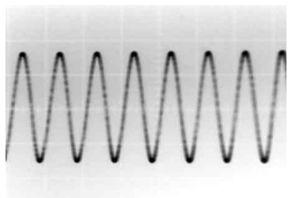
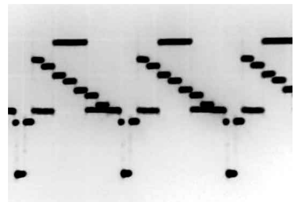
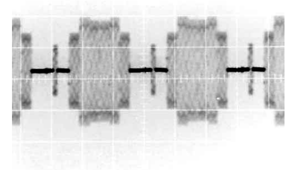
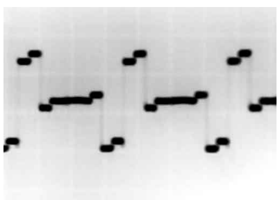
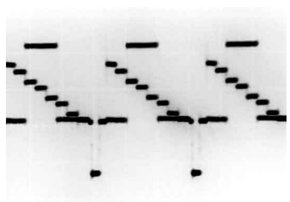
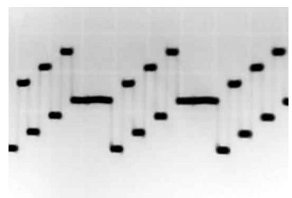
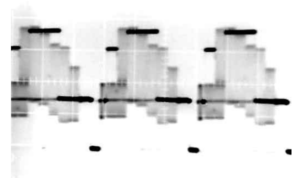
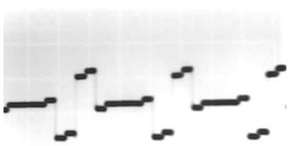
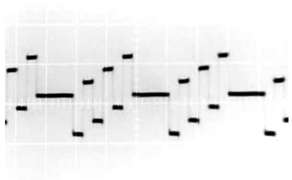
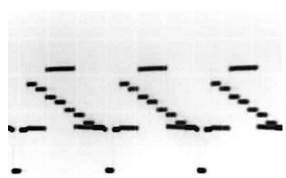
Ref No.	P59001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
REC	3.3	5.1	3.3	5.1	5.0	3.3	2.3	3.1	2.5	4.9	2.5	3.3	0	3.3	0	3.3	0	3.3	2.5	-
PLAY	3.3	5.1	3.3	5.1	5.0	3.3	2.3	3.1	2.5	4.9	2.5	3.3	0	3.3	0	3.3	0	3.3	2.5	-
STOP	3.3	5.1	3.3	5.1	5.0	3.3	2.3	3.2	2.5	4.9	2.5	3.3	0	3.3	0	3.3	0	3.3	2.5	-

Ref No.	P59001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
REC	2.5	3.2	0	1.7	0	0	0	3.3	0	3.3	1.1	-	0	0.3	1.5	3.3	0	-	1.0	4.8
PLAY	2.5	3.2	0	1.7	0	0	0	3.3	0	3.3	1.1	-	0	0.3	1.5	3.3	0	-	1.0	4.8
STOP	2.5	3.2	0	1.7	0	0	0	3.3	0	3.3	1.1	-	0	0.3	1.5	3.3	0	-	1.0	4.8

Ref No.	P59001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
REC	0	4.8	1.1	12.3	0	12.3	1.0	12.3	0	12.3	1.3	12.3	0	12.3	2.1	5.0	0	0	-	-
PLAY	0	4.8	1.1	12.3	0	12.3	1.0	12.3	0	12.3	1.3	12.3	0	12.3	2.1	5.0	0	0	-	-
STOP	0	4.8	1.1	12.3	0	12.3	1.0	12.3	0	12.3	1.3	12.3	0	12.3	2.1	5.0	0	0	-	-

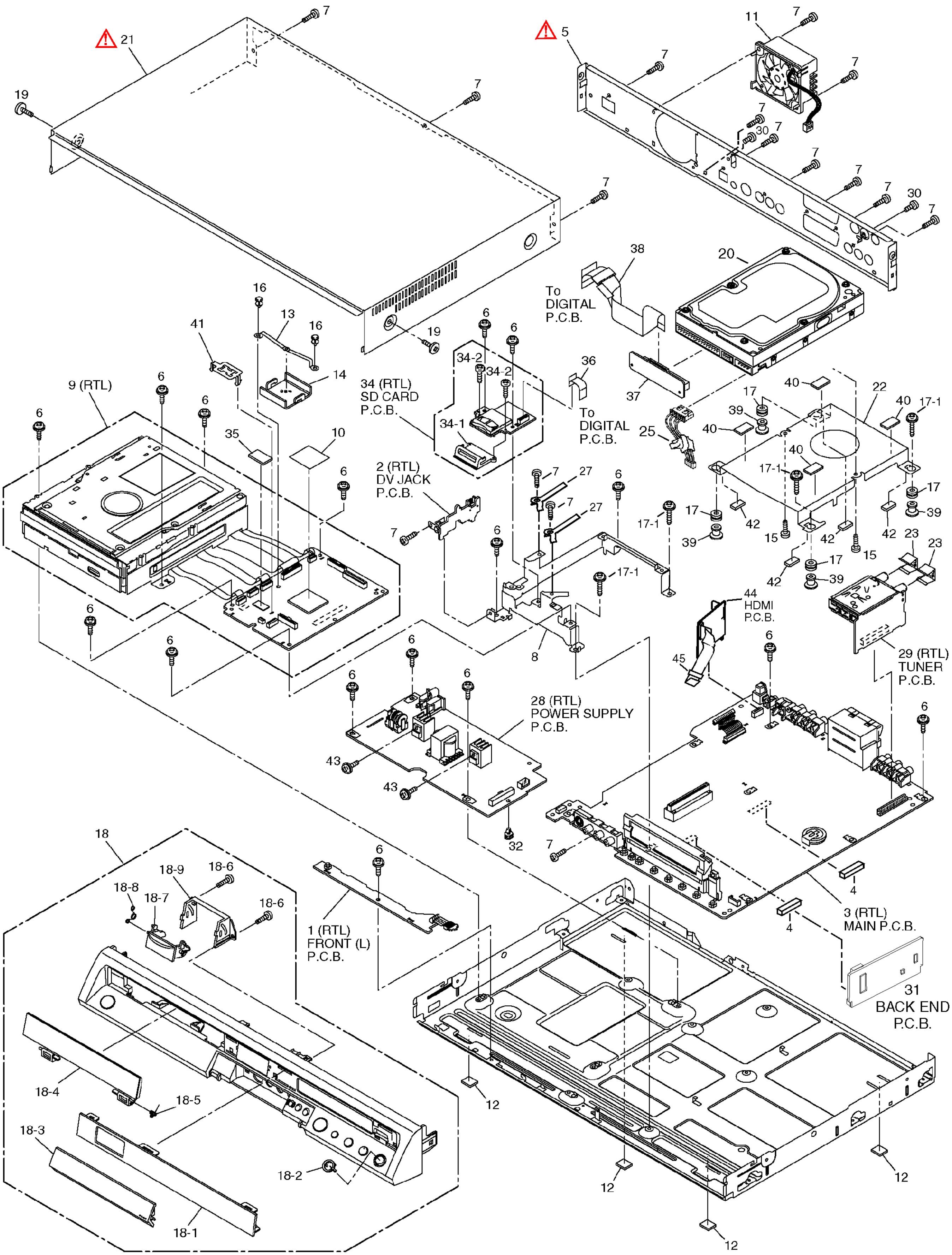
Ref No.	P59001																			
MODE	81	82	83	84	85	86	87	88												
REC	0	0	0	.33	0	0	0	0												
PLAY	0	0	0	0.3	0	0	0	0												
STOP	0	0	0	0.3	0	0	0	0												

15.1.2. WAVEFORM CHART

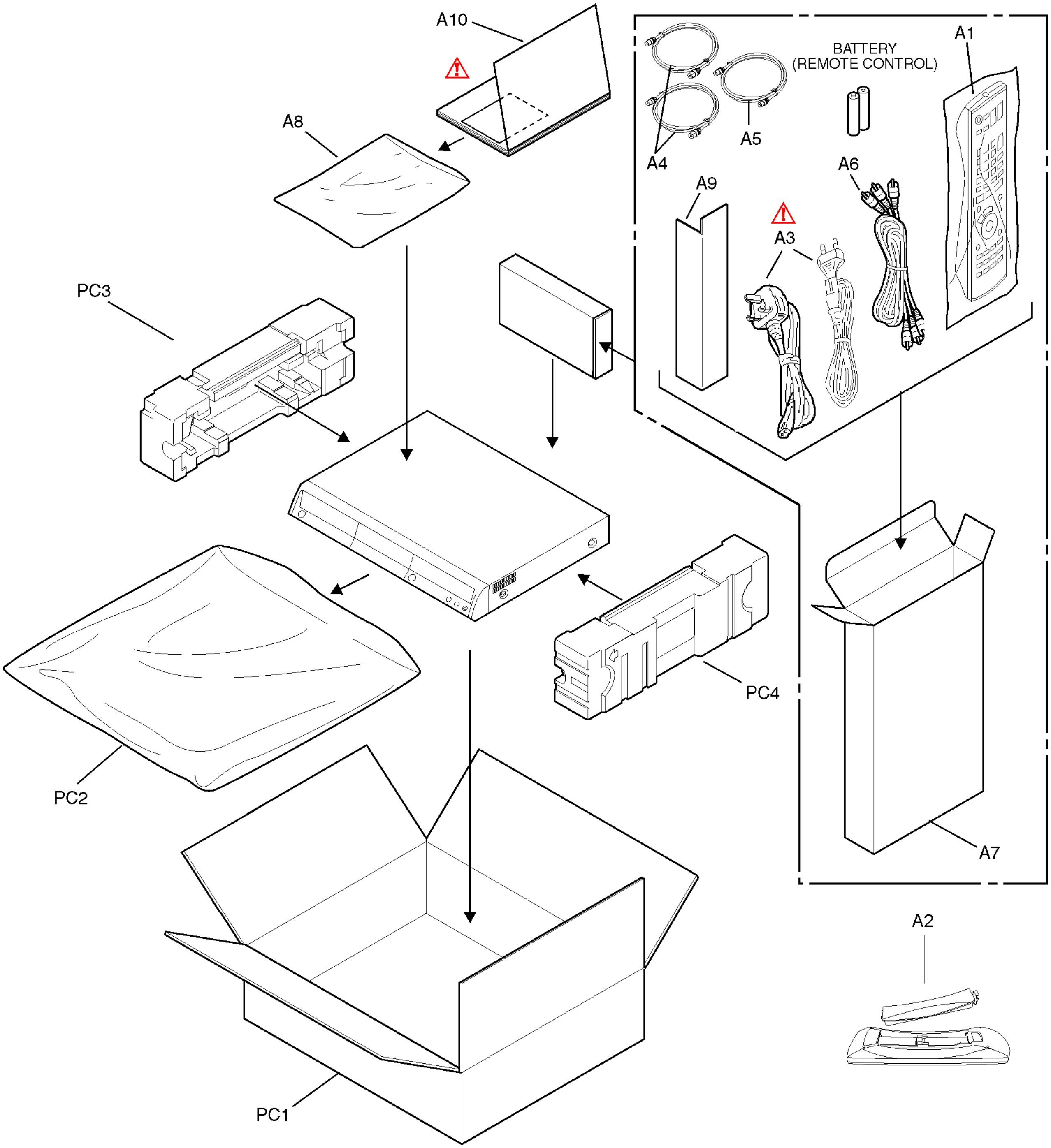
 T1150-4,5 STOP 30Vp-p (5 μ sec.div)	 T1150-8 STOP 30Vp-p (5 μ sec.div)	 T1150-12 STOP 10Vp-p (2m sec.div)	 IC1150-1 STOP 10.0Vp-p (5 μ sec.div)
 IC1150-9 STOP 580Vp-p (5 μ sec.div)	 P7402-29,31 REC/PLAY 0.8Vp-p (1m sec.div)	 P7402-51 REC/PLAY 1.0Vp-p (20 μ sec.div)	 P7402-55 REC/PLAY 0.8Vp-p (20 μ sec.div)
 P7402-59 REC/PLAY 0.6Vp-p (20 μ sec.div)	 P7402-63 REC/PLAY 1.0Vp-p (20 μ sec.div)	 P7402-67 REC/PLAY 0.6Vp-p (20 μ sec.div)	 P7402-71 REC/PLAY 1.0Vp-p (20 μ sec.div)
 JK3903-2 REC/PLAY 1.0Vp-p (20 μ sec.div)	 JK3903-4 REC/PLAY 1.0Vp-p (20 μ sec.div)	 JK3903-6 REC/PLAY 2.0Vp-p (20 μ sec.div)	

16 EXPLODED VIEWS

16.1. CASING PARTS AND & MECHANISM SECTION



16.2. PACKING & ACCESSORIES SECTION



17 REPLACEMENT PARTS LIST

Notes:

*Important safety notice:

Components identified by ⚠ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufactures specified parts shown in the parts list.

*Warning: This product uses a laser diode. Refer to caution statements.

*Capacity values are in microfarads (µF) unless specified otherwise, P=Pico-farads (pF), F=Farads (F).

*Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM), 1M=1,000k (OHM).

*The marking (RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

*All parts except parts mentioned [SPC] in the Remarks column are supplied from PAVCG.

*Parts mentioned [SPC] are supplied from PAVC

*The 1, 2, 3, 4, 5 in the Remarks column shows the models as follows:

1 = DMR-EX75EC-S

2 = DMR-EX75EG-S

3 = DMR-EX75EB-S

4 = DMR-EX85EB-S

5 = DMR-EX85EG-S

No indication = all models

17.1. CASING PARTS & PRINTED CIRCUIT BOARDS

Ref. No.	Part No.	Part Name & Description	PCS	Remarks
&block ; 1	REPD0030A	FRONT L PCB U	1	RTL 1,2,3,4,5
&block ; 2	VEP73135A	DV JACK PCB UNIT	1	RTL 1,2,3,4,5
&block ; 3	REPD0029D	MAIN PCB UNIT	1	RTL 3,4
■ 3	REPD0029FT	MAIN PCB UNIT	1	RTL 1,
■ 3	REPD0029CT	MAIN PCB UNIT	1	RTL 2,5
4	RMX0364	SPACER	2	1,2,3,4,5
5	RGR0365C-H1	REAR PANEL	1	⚠ ; 1,2
5	RGR0365C-J1	REAR PANEL	1	⚠ 3
5	RGR0365C-L1	REAR PANEL	1	⚠ 4
5	RGR0365C-K1	REAR PANEL	1	⚠ 5
6	RHD30111-3	SCREW	16	1,2,3,4,5
7	RHD30119-L	SCREW	16	1,2,3,4,5
8	RMA1979A	DIGITAL ANGLE A	1	1,2,3,4,5
&block ; 9	RFKNEX75EC	RAM DIGITAL PCB MODULE	1	RTL 1
■ 9	RFKNEX75EG	RAM DIGITAL PCB MODULE	1	RTL 2
■ 9	RFKNEX75EB	RAM DIGITAL PCB MODULE	1	RTL 3
■ 9	RFKNEX85EG	RAM DIGITAL PCB MODULE	1	RTL 5
■ 9	RFKNEX85EB	RAM DIGITAL PCB MODULE	1	RTL 4
10	RMQ1513	HEAT TRANSFER SHEET	1	1,2,3,4,5
11	L6FAJDAE0001	FAN MOTOR	1	1,2,3,4,5
12	RKA0144-K	FOOT RUBBER	4	1,2,3,4,5
13	RMC0672	PLATE SPRING	1	1,2,3,4,5
14	RMY0357	HEAT SINK	1	1,2,3,4,5
15	RHD32001	SCREW WITH WASHER	2	1,2,3,4,5
16	VKC0295	MINI CARD SPACER	2	1,2,3,4,5
17	RMG0704-W	DAMPER	4	1,2,3,4,5
17-1	RHD30149	SCREW	4	1,2,3,4,5
18	RYP1326-S	FRONT PANEL U	1	5
18	RYP1326A-S	FRONT PANEL U	1	4
18	RYP1325A-S	FRONT PANEL U	1	3
18	RYP1325-S	FRONT PANEL U	1	1,2
18-1	RGK1969-S	FL ORNAMENT	1	4,5
18-1	RGK1968A-Q	FL ORNAMENT	1	1,2,3,
18-2	RGK1971-S	REC BUTTON RING	1	1,2,3,4,5
18-3	RKF0753J-S	PANEL DOOR	1	4,5
18-3	RKF0753H-S	PANEL DOOR	1	1,2,3
18-4	RYF0785-K	TRAY DOOR UNIT	1	4,5
18-4	RYF0782C-K	TRAY DOOR UNIT	1	1,2,3
18-5	VMB3410	BLINDER SPRING	1	1,2,3,4,5
18-6	RHD26045	SCREW (PANEL)	2	1,2,3,4,5
18-7	RKF0754-K	SD BLINDER	1	1,2,3,4,5
18-8	RMB0841-1	SD LID SPRING	1	1,2,3,4,5
18-9	RMR1767-K	SD CHASSIS	1	1,2,3,4,5
19	RHD30113	SCREW TOP CASE SIDE	2	1,2,3,4,5
20	RFKV0069HDK	HDD ASSEMBLY	1	1,2,3
20	RFKV0071HDK	HDD ASSEMBLY	1	4,5
21	RKM0552A-S	TOP PANEL	1	⚠ 1,2,3,4,5
22	RMN0857	HDD BRACKET	1	1,2,3,4,5
23	RMC0625	TUNER GND	2	1,2,3,4,5
25	VEE0Z41	MAIN-HDD CABLE U	1	1,2,3,4,5
27	VMC1534	EARTH SPRING (T)	2	1,2,3,4,5
&block ; 28	VEP71110B	POWER PCB UNIT	1	RTL 1,2,3,4,5
&block ; 29	REPD0032A	TUNER PCB UNIT	1	RTL 2,5
■ 29	REPD0032B	TUNER PCB UNIT	1	RTL 3,4
■ 29	REPD0032C	TUNER PCB UNIT	1	RTL 1
30	XSN3+4FJ	SCREW (TUNER)	2	1,2,3,4,5
&block ; 31	REPD0031A	BACKEND PCB UNIT	1	RTL 2,5
■ 31	REPD0031C	BACKEND PCB UNIT	1	RTL 3,4,
■ 31	REPD0031D	BACKEND PCB UNIT	1	RTL 1,
32	VMX1336	MINI CARD SPACER	1	1,2,3,4,5
&block ; 34	VEP73136A	SD CARD PCB UNIT	1	1,2,3,4,5
34-1	RMR1766-K	SD CARD HOLDER	1	1,2,3,4,5
34-2	XTN2+8GFJ	SCREW	2	1,2,3,4,5
35	RMQ1514	HEAT TRANSF. SHEET D	1	1,2,3,4,5
36	VWJ1877	DIGITAL-SD FFC	1	1,2,3,4,5
37	N5EZZ0000003	ATAPI CONNECTOR UNIT	1	1,2,3,4,5
38	REZD0026	DIGITAL-HDD FFC	1	1,2,3,4,5
39	RMX0358	SLEEVE	4	1,2,3,4,5
40	RMX0359	HDD CUSHION SPACER	4	1,2,3,4,5
41	RMV0312	SHEET COVER	1	1,2,3,4,5
42	RMX0362	GEL SPACER	4	1,2,3,4,5
43	XYN3+J8FJ	SCREW	2	1,2,3,4,5
&block ; 44	VEP73137AB	HDMI PCB U	1	RTL 1,2,3,4,5
45	VWJ1878	DIGITAL-HDMI FFC	1	1,2,3,4,5

17.2. PACKING & ACCESSORIES PARTS

Ref. No.	Part No.	Part Name & Description	PCS	Remarks
A1	EUR7659YM0	REMOTE CONTROL	1	2,5
A1	EUR7659YG0	REMOTE CONTROL	1	3,4
A1	EUR7659T40	REMOTE CONTROL	1	1
A2	UR76EC5903	BATTERY COVER	1	1,2,3,4,5
A3	RJA0043-1C	POWERCORD	1	⚠ 1,2,5
A3	K2CT3CA00004	POWERCORD UK	1	⚠ 3,4
A4	K1TWACC00001	RF CABLE	2	1,2,3,4,5
A5	K1TWACA00001	RF CABLE	1	3,4
A6	K2KA6BA00003	AV CORD	1	1,2,3,4,5
A7	RPQFD0001	ACCESSORY BOX	1	1,2,3,4,5
A8	RPFD0007	PE-BAG,24cmx37cmx40	1	3,4
A8	RPFD0005	PE-BAG,28cmx41cmx40	1	1,2,5
A9	RPQD0003	PAD (C)	1	1,2,3,4,5
A10	RQTD0211-A	O/I BOOK ENG CONT	1	2,5
A10	RQTD0216-A	O/I BOOK ENG CONT	1	1
A10	RQTD0214-1B	O/I BOOK ENG UK	1	3,4
A10	RQTD0212-C	O/I BOOK FRE	1	1
A10	RQTD0210-D	O/I BOOK GER	1	2,5
A10	RQTD0215-V	O/I BOOK ITA	1	1
A10	RQTD0213-M	O/I BOOK SPA	1	1
A10	RQCC2704	DVD-MEDIA LEAFLET	1	1,2,3,4,5
A10	RQCAD0032	QUICK START GUIDE	1	3,4
A10	RQCAD0034	REFERENCE GUIDE	1	3,4
A10	RQCB1293	REGISTRATION LEAFLET	1	1,2,5
PC1	RPG7861-1	CARTON BOX	1	3
PC1	RPG7860-2	CARTON BOX	1	1
PC1	RPG7859-1	CARTON BOX	1	2
PC1	RPG8020-2	CARTON BOX	1	4
PC1	RPG8019-2	CARTON BOX	1	5
PC2	RPFD0004	MIRAMAT BAG	1	1,2,3,4,5
PC3	RPN1859A-2	CUSHION(LEFT)	1	1,2,3,4,5
PC4	RPN1859B-2	CUSHION(RIGHT)	1	1,2,3,4,5

17.3. ELECTRICAL PARTS

Ref. No.	Part No.	Part Name & Description	PCS	Remarks
C1120	ECQU2A683MLC	X2 CAPACITOR	1	⚠ 1,2,3,4,5
C1121	ECQU2A223MLC	EMI CAPACITOR	1	⚠ 1,2,3,4,5
C1122	ECKWNA102MEV	CERAMIC CAPACITOR	1	⚠ 1,2,3,4,5
C1123	ECKWNA102MEV	CERAMIC CAPACITOR	1	⚠ 1,2,3,4,5
C1125	ECKWNA102MEV	CERAMIC CAPACITOR	1	⚠ 1,2,3,4,5
C1143	F2B2W4700003	ALU ELEC CAPACITOR	1	1,2,3,4,5
C1150	F2A1V6800002	ALU ELEC CAPACITOR	1	1,2,3,4,5
C1151	F1B3D102A011	CERAMIC CAPACITOR	1	1,2,3,4,5
C1152	ECJ2VC1H331J	CHIP CAPACITOR	1	1,2,3,4,5
C1153	ECJGVB1H222K	CHIP CAPACITOR	1	1,2,3,4,5
C1154	ECJGVB1H102K	CHIP CAPACITOR	1	1,2,3,4,5
C1200	F1J1E104A081	CHIP CAPACITOR	1	1,2,3,4,5
C1201	ECJ2VB1E473K	CHIP CAPACITOR	1	1,2,3,4,5
C1270	F2A1C1820005	ALU ELEC CAPACITOR	1	1,2,3,4,5
C1271	F2A1C1820005	ALU ELEC CAPACITOR	1	1,2,3,4,5
C1272	F2A1C8210008	ALU ELEC CAPACITOR	1	1,2,3,4,5
C1503	F2A1A2210063	ALU ELEC CAPACITOR	1	1,2,3,4,5
C1504	F2A1E1010067	ALU ELEC CAPACITOR	1	1,2,3,4,5
C1506	F2A1A470A388	ALU ELEC CAPACITOR	1	1,2,3,4,5
C1508	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C1509	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C1510	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C1511	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C1512	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C1515	F2A1A470A388	ALU ELEC CAPACITOR	1	1,2,3,4,5
C1516	F2A1A4710038	ALU ELEC CAPACITOR	1	1,2,3,4,5

Ref. No.	Part No.	Part Name & Description	PCS	Remarks
C1518	F2A0J681A550	ALU ELEC CAPACITOR	1	1,2,3,4,5
C1519	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C1520	ECJ3FB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C1522	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C1523	F2A1A470A388	ALU ELEC CAPACITOR	1	1,2,3,4,5
C1524	F2A1A101A389	ALU ELEC CAPACITOR	1	1,2,3,4,5
C1526	ECJ2FB1A225K	CHIP CAPACITOR	1	1,2,3,4,5
C1527	F1H1H1020005	CHIP CAPACITOR	1	1,2,3,4,5
C1528	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C1529	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C1530	F2A1E1010103	ALU ELEC CAPACITOR	1	1,2,3,4,5
C1531	ECJ1VB1A334K	CHIP CAPACITOR	1	1,2,3,4,5
C1532	ECJ1VB1H331K	CHIP CAPACITOR	1	1,2,3,4,5
C1533	F2A0J681A550	ALU ELEC CAPACITOR	1	1,2,3,4,5
C1534	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C1535	F2A1E3310051	ALU ELEC CAPACITOR	1	1,2,3,4,5
C1538	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C1539	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C1540	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C1541	F2A1E1010067	ALU ELEC CAPACITOR	1	1,2,3,4,5
C1601	F2A1E2210050	ALU ELEC CAPACITOR	1	1,2,3,4,5
C1602	F1J1E104A081	CHIP CAPACITOR	1	1,2,3,4,5
C1603	F1J1E104A081	CHIP CAPACITOR	1	1,2,3,4,5
C1604	ECJ2YB1C474K	CHIP CAPACITOR	1	1,2,3,4,5
C1605	ECJ2VC1H181J	CHIP CAPACITOR	1	1,2,3,4,5
C1606	ECJGVB1H103K	CHIP CAPACITOR	1	1,2,3,4,5
C1607	F2A1A6810022	ALU ELEC CAPACITOR	1	1,2,3,4,5
C1608	F1J1E104A081	CHIP CAPACITOR	1	1,2,3,4,5
C1701	F2A1E2210050	ALU ELEC CAPACITOR	1	1,2,3,4,5
C1702	F1H1C104A042	CHIP CAPACITOR	1	1,2,3,4,5
C1703	F1H1C104A042	CHIP CAPACITOR	1	1,2,3,4,5
C1704	F1H1C104A042	CHIP CAPACITOR	1	1,2,3,4,5
C1705	ECJ1VC1H181J	CHIP CAPACITOR	1	1,2,3,4,5
C1706	F1H1H1030006	CHIP CAPACITOR	1	1,2,3,4,5
C1707	F2A0J6810007	ALU ELEC CAPACITOR	1	1,2,3,4,5
C1800	F2A1E4700048	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3001	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C3002	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C3003	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C3004	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C3005	F2A0J471A016	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3006	F2A0J471A016	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3007	F2A0J471A016	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3008	F2A1A1010072	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3009	F2A0J471A016	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3010	F2A1A1010072	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3011	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C3012	F2A0J471A016	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3013	F2A1E4700048	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3014	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C3015	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C3016	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C3017	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C3018	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C3019	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C3020	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C3021	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C3022	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C3023	F1H1H330A736	CHIP CAPACITOR	1	1,2,3,4,5
C3025	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C3026	ECJ1VF1C105Z	CHIP CAPACITOR	1	1,2,3,4,5
C3027	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C3028	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C3029	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C3030	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C3031	ECJ1VF1C105Z	CHIP CAPACITOR	1	1,2,3,4,5
C3032	ECEA0JKA101B	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3033	ECJ1VF1C105Z	CHIP CAPACITOR	1	1,2,3,4,5
C3034	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C3035	ECEA0JKA101B	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3036	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C3037	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C3038	ECJ1VC1H100D	CHIP CAPACITOR	1	1,2,3,4,5

Ref. No.	Part No.	Part Name & Description	PCS	Remarks
C3039	ECJ1VC1H100D	CHIP CAPACITOR	1	1,2,3,4,5
C3040	ECJ1VC1H100D	CHIP CAPACITOR	1	1,2,3,4,5
C3041	ECJ1VC1H100D	CHIP CAPACITOR	1	1,2,3,4,5
C3042	ECJ1VC1H100D	CHIP CAPACITOR	1	1,2,3,4,5
C3043	ECJ1VC1H100D	CHIP CAPACITOR	1	1,2,3,4,5
C3044	ECJ1VC1H100D	CHIP CAPACITOR	1	1,2,3,4,5
C3057	ECJ1VB1H471K	CHIP CAPACITOR	1	1,2,3,4,5
C3058	ECJ1VB1H471K	CHIP CAPACITOR	1	1,2,3,4,5
C3059	ECJ1VB1H471K	CHIP CAPACITOR	1	1,2,3,4,5
C3060	ECJ1VB1H471K	CHIP CAPACITOR	1	1,2,3,4,5
C3064	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C3065	ECJ1VF1C105Z	CHIP CAPACITOR	1	1,2,3,4,5
C3070	ECJ1VB1H471K	CHIP CAPACITOR	1	1,2,3,4,5
C3071	ECJ1VB1H471K	CHIP CAPACITOR	1	1,2,3,4,5
C3072	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C3910	F2A1V100A534	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3911	F2A1V100A534	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3914	F2A1H100A236	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3915	F2A1H100A236	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3916	F2A1H1R0A236	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3917	F2A1H1R0A236	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3918	F2A1H100A236	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3919	F2A1H100A236	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3928	F2A1V100A534	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3929	F2A1V100A534	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3935	F2A1E2210050	ALU ELEC CAPACITOR	1	1,2,3,4,5
C3951	F1H1H4700004	CHIP CAPACITOR	1	1,2,3,4,5
C3952	F1H1H4700004	CHIP CAPACITOR	1	1,2,3,4,5
C3953	ECJ1VB1H471K	CHIP CAPACITOR	1	1,2,3,4,5
C3954	ECJ1VB1H471K	CHIP CAPACITOR	1	1,2,3,4,5
C3955	F1H1H1010005	CHIP CAPACITOR	1	1,2,3,4,5
C3956	F1H1H1010005	CHIP CAPACITOR	1	1,2,3,4,5
C3957	ECJ1VB1H471K	CHIP CAPACITOR	1	1,2,3,4,5
C3958	ECJ1VB1H471K	CHIP CAPACITOR	1	1,2,3,4,5
C3959	F1H1H4700004	CHIP CAPACITOR	1	1,2,3,4,5
C3960	F1H1H4700004	CHIP CAPACITOR	1	1,2,3,4,5
C3961	F1H1H1010005	CHIP CAPACITOR	1	1,2,3,4,5
C3962	F1H1H1010005	CHIP CAPACITOR	1	1,2,3,4,5
C4005	F2A1H100A638	ALU ELEC CAPACITOR	1	1,2,3,4,5
C4006	F2A1H100A638	ALU ELEC CAPACITOR	1	1,2,3,4,5
C4008	F2A1E1010067	ALU ELEC CAPACITOR	1	1,2,3,4,5
C4019	F2A1C220A637	ALU ELEC CAPACITOR	1	1,2,3,4,5
C4021	F2A1C220A637	ALU ELEC CAPACITOR	1	1,2,3,4,5
C4023	F2A1H1R0A236	ALU ELEC CAPACITOR	1	1,2,3,4,5
C4024	F2A1E1010067	ALU ELEC CAPACITOR	1	1,2,3,4,5
C4025	F2A1H1R0A236	ALU ELEC CAPACITOR	1	1,2,3,4,5
C4027	F2A1H100A638	ALU ELEC CAPACITOR	1	1,2,3,4,5
C4028	F2A1H100A638	ALU ELEC CAPACITOR	1	1,2,3,4,5
C4030	F1H1H472A219	CHIP CAPACITOR	1	1,2,3,4,5
C4031	F1H1H472A219	CHIP CAPACITOR	1	1,2,3,4,5
C4033	F2A1C220B173	ALU ELEC CAPACITOR	1	1,2,3,4,5
C4034	F2A1C220B173	ALU ELEC CAPACITOR	1	1,2,3,4,5
C4052	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C4053	F2A1H100A638	ALU ELEC CAPACITOR	1	1,2,3,4,5
C4054	F2A1H100A638	ALU ELEC CAPACITOR	1	1,2,3,4,5
C4055	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C4056	F2A1C471A628	ALU ELEC CAPACITOR	1	1,2,3,4,5
C4057	ECJ2VC1H330J	CHIP CAPACITOR	1	1,2,3,4,5
C4059	ECQV1H104JL2	PLAST FILM CAPACITOR	1	1,2,3,4,5
C4060	ECJ2VC1H330J	CHIP CAPACITOR	1	1,2,3,4,5
C4061	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C4062	F2A1A221A206	ALU ELEC CAPACITOR	1	1,2,3,4,5
C4063	F2A1C220B173	ALU ELEC CAPACITOR	1	1,2,3,4,5
C4064	F2A1C220B173	ALU ELEC CAPACITOR	1	1,2,3,4,5
C4065	F1H1H1010005	CHIP CAPACITOR	1	1,2,3,4,5
C4066	F1H1H1010005	CHIP CAPACITOR	1	1,2,3,4,5
C4067	F2A1E4700048	ALU ELEC CAPACITOR	1	1,2,3,4,5
C4082	ECJ2VC1H561J	CHIP CAPACITOR	1	1,2,3,4,5
C4083	ECJ2VC1H561J	CHIP CAPACITOR	1	1,2,3,4,5
C4092	F2A1E2210050	ALU ELEC CAPACITOR	1	1,2,3,4,5
C4903	F2A1E4700048	ALU ELEC CAPACITOR	1	1,2,3,4,5
C4904	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C56001	ECJ0EC1H221J	CHIP CAPACITOR	1	1,2,3,4,5

Ref. No.	Part No.	Part Name & Description	PCS	Remarks
C56101	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56102	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56103	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56104	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56105	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56106	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56107	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56108	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56109	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56110	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56111	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56112	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56113	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56114	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56115	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56116	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56117	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56118	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56119	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56120	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56121	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56122	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56123	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56124	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56125	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56126	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56127	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56128	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56129	ECJ0EC1H221J	CHIP CAPACITOR	1	1,2,3,4,5
C56130	F1H0J1050012	CHIP CAPACITOR	1	1,2,3,4,5
C56131	F1J0J106A014	CHIP CAPACITOR	1	1,2,3,4,5
C56132	ECJ0EB1C103K	CHIP CAPACITOR	1	1,2,3,4,5
C56133	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C56134	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C56135	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C56140	ECJ0EB1A104K	CHIP CAPACITOR	1	1,2,3,4,5
C6801	F1H1H1030006	CHIP CAPACITOR	1	1,2,3,4,5
C6802	F1H1A225A051	CHIP CAPACITOR	1	1,2,3,4,5
C7301	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C7302	ECEA0JKA101B	ALU ELEC CAPACITOR	1	1,2,3,4,5
C7303	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C7304	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7305	F1H1H330A736	CHIP CAPACITOR	1	1,2,3,4,5
C7306	F1H1H330A736	CHIP CAPACITOR	1	1,2,3,4,5
C7307	F1H1H332A219	CHIP CAPACITOR	1	2,5
C7308	ECJ1VC1H681J	CHIP CAPACITOR	1	2,5
C7308	D0GB822JA057	CHIP RESISTOR	1	1,2,3,4,5
C7309	F1H1H332A219	CHIP CAPACITOR	1	2,5
C7310	ECJ1VC1H681J	CHIP CAPACITOR	1	2,5
C7311	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C7312	F1H1C104A042	CHIP CAPACITOR	1	1,2,3,4,5
C7313	ECJ1VF1C474Z	CHIP CAPACITOR	1	2,5
C7314	F1H1H1030006	CHIP CAPACITOR	1	1,2,3,4,5
C7314	F1H1C104A042	CHIP CAPACITOR	1	1,2,3,4,5
C7315	F1H1H9R0A735	CHIP CAPACITOR	1	2,5
C7316	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7317	ECJ1VB1H152K	CHIP CAPACITOR	1	1,2,3,4,5
C7318	ECEA0JKA470B	ALU ELEC CAPACITOR	1	1,2,3,4,5
C7319	ECEA1CKA100B	ALU ELEC CAPACITOR	1	1,2,3,4,5
C7320	ECEA1CKA100B	ALU ELEC CAPACITOR	1	1,2,3,4,5
C7321	F1H1H472A219	CHIP CAPACITOR	1	1,2,3,4,5
C7322	ECJ1VF1C474Z	CHIP CAPACITOR	1	2,5
C7323	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7325	F1H1H1030006	CHIP CAPACITOR	1	1,2,3,4,5
C7327	ECJ1VB1H152K	CHIP CAPACITOR	1	1,2,3,4,5
C7328	ECJ1VF1C474Z	CHIP CAPACITOR	1	2,5
C7328	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7329	ECJ1VF1C474Z	CHIP CAPACITOR	1	2,5
C7330	F1H1C104A042	CHIP CAPACITOR	1	1,2,3,4,5
C7331	F1J1C4740012	CHIP CAPACITOR	1	2,5
C7331	F1J1A105A003	CHIP CAPACITOR	1	1,3,4
C7343	ECEA0JKA101B	ALU ELEC CAPACITOR	1	1,2,3,4,5
C7402	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5

Ref. No.	Part No.	Part Name & Description	PCS	Remarks
C7404	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C7406	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C7412	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C7413	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C7417	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7418	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C7419	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C7420	F2A1A2210063	ALU ELEC CAPACITOR	1	1,2,3,4,5
C7439	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7440	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7501	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C7502	F1H1H1010005	CHIP CAPACITOR	1	1,2,3,4,5
C7503	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C7504	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7505	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7506	ECJ1VB1H221K	CHIP CAPACITOR	1	1,2,3,4,5
C7507	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7508	ECJ1VB1H221K	CHIP CAPACITOR	1	1,2,3,4,5
C7509	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7510	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7511	F1H1H1010005	CHIP CAPACITOR	1	1,2,3,4,5
C7512	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7513	ECJ1VC1H100D	CHIP CAPACITOR	1	1,2,3,4,5
C7515	ECJ1VC1H100D	CHIP CAPACITOR	1	1,2,3,4,5
C7516	ECJ1VC1H180J	CHIP CAPACITOR	1	1,2,3,4,5
C7517	ECJ1VC1H180J	CHIP CAPACITOR	1	1,2,3,4,5
C7518	ECJ1VC1H220J	CHIP CAPACITOR	1	1,2,3,4,5
C7519	ECJ1VC1H180J	CHIP CAPACITOR	1	1,2,3,4,5
C7520	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C7522	F1H1H1010005	CHIP CAPACITOR	1	1,2,3,4,5
C7523	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C7524	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7528	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7531	ECJ1VC1H100D	CHIP CAPACITOR	1	1,2,3,4,5
C7532	ECJ1VC1H100D	CHIP CAPACITOR	1	1,2,3,4,5
C7534	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C7541	F1H1H4700004	CHIP CAPACITOR	1	1,2,3,4,5
C7542	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7543	F1H1H4700004	CHIP CAPACITOR	1	1,2,3,4,5
C7544	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7546	ECJ1VF1C105Z	CHIP CAPACITOR	1	1,2,3,4,5
C7547	ECJ1VF1C105Z	CHIP CAPACITOR	1	1,2,3,4,5
C7551	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7554	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C7555	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
C7556	ECJ1VC1H102J	CHIP CAPACITOR	1	1,2,3,4,5
C7557	ECJ1VC1H102J	CHIP CAPACITOR	1	1,2,3,4,5
C7558	ECJ1VC1H102J	CHIP CAPACITOR	1	1,2,3,4,5
C7565	F2A1E2210050	ALU ELEC CAPACITOR	1	1,2,3,4,5
C7569	ECQB1H392KF3	PLAST FILM CAPACITOR	1	1,2,3,4,5
C7570	F2A1V470A006	ALU ELEC CAPACITOR	1	1,2,3,4,5
C7571	F2A1H100A003	ALU ELEC CAPACITOR	1	1,2,3,4,5
C7572	F2A1A2210005	ALU ELEC CAPACITOR	1	1,2,3,4,5
C7573	F2A1H100A003	ALU ELEC CAPACITOR	1	1,2,3,4,5
C7577	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7578	ECEA0JKA221B	ALU ELEC CAPACITOR	1	1,2,3,4,5
C7584	F4D55473A013	ALU ELEC CAPACITOR	1	1,2,3,4,5
C7585	F2A0J101A012	ALU ELEC CAPACITOR	1	1,2,3,4,5
C7587	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C7592	ECEA0JKA470B	ALU ELEC CAPACITOR	1	1,2,3,4,5
C7800	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7801	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7802	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7803	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7804	ECEA0JKA470B	ALU ELEC CAPACITOR	1	1,2,3,4,5
C7805	ECEA0JKA470B	ALU ELEC CAPACITOR	1	1,2,3,4,5
C7806	ECEA1HKA010B	ALU ELEC CAPACITOR	1	1,2,3,4,5
C7807	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C7808	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C7809	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C7810	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C7811	F1H1H330A736	CHIP CAPACITOR	1	1,2,3,4,5
C7812	F1H1H330A736	CHIP CAPACITOR	1	1,2,3,4,5

Ref. No.	Part No.	Part Name & Description	PCS	Remarks
C7813	ECEA1CKA220B	ALU ELEC CAPACITOR	1	1,2,5
C7814	F1H1C104A042	CHIP CAPACITOR	1	1,2,3,4,5
C7815	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C7816	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C7817	ECJ1VB1A105K	CHIP CAPACITOR	1	1,2,3,4,5
C7818	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C7819	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C7820	F1H1E104A030	CHIP CAPACITOR	1	1,2,3,4,5
C7821	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C7822	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C7822	F1H1H2700003	CHIP CAPACITOR	1	3,4
C9001	F1H1H1030006	CHIP CAPACITOR	1	1,2,3,4,5
C9002	F1H1H1030006	CHIP CAPACITOR	1	1,2,3,4,5
C9003	F1H1C104A042	CHIP CAPACITOR	1	1,2,3,4,5
C9004	F1H1H1030006	CHIP CAPACITOR	1	1,2,3,4,5
C9005	F1H1H1030006	CHIP CAPACITOR	1	1,2,3,4,5
C9006	ECJ1VC1H020C	CHIP CAPACITOR	1	1,2,3,4,5
C9007	ECJ2FB1A225K	CHIP CAPACITOR	1	1,2,3,4,5
C9008	F1H1C104A042	CHIP CAPACITOR	1	1,2,3,4,5
C9009	F1H1H1030006	CHIP CAPACITOR	1	1,2,3,4,5
C9010	F1H1H1030006	CHIP CAPACITOR	1	1,2,3,4,5
C9011	F1H1C104A042	CHIP CAPACITOR	1	1,2,3,4,5
C9012	ECJ1VC1H100C	CHIP CAPACITOR	1	1,2,3,4,5
C9012	F1H1H1200004	CHIP CAPACITOR	1	1
C9013	ECJ1VC1H100C	CHIP CAPACITOR	1	1,2,3,4,5
C9013	F1H1H1200004	CHIP CAPACITOR	1	1
C9014	F1H1C104A042	CHIP CAPACITOR	1	1,2,3,4,5
C9038	F1H1C104A042	CHIP CAPACITOR	1	1,2,3,4,5
C9039	ECJ1VB1H221K	CHIP CAPACITOR	1	1,2,3,4,5
C9040	ECJ1VB1H221K	CHIP CAPACITOR	1	1,2,3,4,5
C9042	F1H1C104A008	CHIP CAPACITOR	1	1,2,3,4,5
C9201	ECJ1VF1C105Z	CHIP CAPACITOR	1	1,2,3,4,5
C9202	ECJ1VC1H102J	CHIP CAPACITOR	1	1,2,3,4,5
C9203	F1H1C104A042	CHIP CAPACITOR	1	1,2,3,4,5
C9204	ECJ1VF1C334Z	CHIP CAPACITOR	1	1,2,3,4,5
C9205	F1H1H1500009	CHIP CAPACITOR	1	1,2,3,4,5
C9206	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C9207	ECJ1VF1C105Z	CHIP CAPACITOR	1	1,2,3,4,5
C9208	F1H1H1500009	CHIP CAPACITOR	1	1,2,3,4,5
C9211	ECJ1VB1H152K	CHIP CAPACITOR	1	1,2,3,4,5
C9212	ECJ1VC1H100C	CHIP CAPACITOR	1	1,2,3,4,5
C9303	F1H1H1030006	CHIP CAPACITOR	1	1,2,3,4,5
C9305	F1H1H1030006	CHIP CAPACITOR	1	1,2,3,4,5
C9306	F1H1H1030006	CHIP CAPACITOR	1	1,2,3,4,5
C9307	ECJ1VF1C105Z	CHIP CAPACITOR	1	1,2,3,4,5
C9308	F1H1C104A008	CHIP CAPACITOR	1	1,2,3,4,5
C9309	ECJ1VF1C105Z	CHIP CAPACITOR	1	1,2,3,4,5
C9310	ECJ1VF1C105Z	CHIP CAPACITOR	1	1,2,3,4,5
C9311	ECJ1VF1C105Z	CHIP CAPACITOR	1	1,2,3,4,5
C9312	F1H1C104A008	CHIP CAPACITOR	1	1,2,3,4,5
C9313	ECJ1VF1C105Z	CHIP CAPACITOR	1	1,2,3,4,5
C9501	ECJ1VF1C105Z	CHIP CAPACITOR	1	1,2,3,4,5
C9502	ECJ1VF1C105Z	CHIP CAPACITOR	1	1,2,3,4,5
C9503	F1H1H1030006	CHIP CAPACITOR	1	1,2,3,4,5
C9504	F1H1H1030006	CHIP CAPACITOR	1	1,2,3,4,5
C9505	F1H1C104A042	CHIP CAPACITOR	1	1,2,3,4,5
C9506	F1H1C104A042	CHIP CAPACITOR	1	1,2,3,4,5
C9507	F1H1H1030006	CHIP CAPACITOR	1	1,2,3,4,5
C9508	F1H1C104A042	CHIP CAPACITOR	1	1,2,3,4,5
C9509	ECJ1VF1C105Z	CHIP CAPACITOR	1	1,2,3,4,5
C9510	ECJ1VF1C105Z	CHIP CAPACITOR	1	1,2,3,4,5
C9511	F1H1H4700004	CHIP CAPACITOR	1	1,2,3,4,5
C9512	F1H1H4700004	CHIP CAPACITOR	1	1,2,3,4,5
C9513	F1H1H4700004	CHIP CAPACITOR	1	1,2,3,4,5
C9514	F1H1H4700004	CHIP CAPACITOR	1	1,2,3,4,5
C9801	EEEHA0J101P	CHIP CAPACITOR	1	1,2,3,4,5
C9802	EEEHA0J101P	CHIP CAPACITOR	1	1,2,3,4,5
C9803	F1H1H1030006	CHIP CAPACITOR	1	1,2,3,4,5
C9804	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C9805	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C9806	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C9807	F1H1C104A042	CHIP CAPACITOR	1	1,2,3,4,5
C9808	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5

Ref. No.	Part No.	Part Name & Description	PCS	Remarks
C9809	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C9810	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C9811	F1H1C104A042	CHIP CAPACITOR	1	1,2,3,4,5
C9812	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C9813	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C9814	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C9815	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C9816	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C9817	F1H1H1030006	CHIP CAPACITOR	1	1,2,3,4,5
C9818	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C9819	F1H1C104A042	CHIP CAPACITOR	1	1,2,3,4,5
C9820	F1H1H1030006	CHIP CAPACITOR	1	1,2,3,4,5
C9821	F1H1H1030007	CHIP CAPACITOR	1	1,2,3,4,5
C9822	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C9823	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C9824	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C9825	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C9826	F1H1H1030006	CHIP CAPACITOR	1	1,2,3,4,5
C9827	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C9828	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C9829	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C9830	F1H1C104A042	CHIP CAPACITOR	1	1,2,3,4,5
C9831	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C9832	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C9833	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C9834	F1H1C104A042	CHIP CAPACITOR	1	1,2,3,4,5
C9835	ECJ1VB1C105K	CHIP CAPACITOR	1	1,2,3,4,5
C9836	F1H1H1030006	CHIP CAPACITOR	1	1,2,3,4,5
C9839	ECJ1VC1H102J	CHIP CAPACITOR	1	1,2,3,4,5
C9903	F2H1C100A013	CAPACITOR	1	1,2,3,4,5
C9904	F2H1H1R0A006	CAPACITOR	1	1,2,3,4,5
C9905	F2H1H1R0A006	CAPACITOR	1	1,2,3,4,5
C9906	F2H1C100A013	CAPACITOR	1	1,2,3,4,5
C9909	ECJ1VC1H070D	CHIP CAPACITOR	1	1,2,3,4,5
C9910	ECJ1VC1H070D	CHIP CAPACITOR	1	1,2,3,4,5
C9911	ECJ1VC1H070D	CHIP CAPACITOR	1	1,2,3,4,5
C9912	ECJ1VC1H070D	CHIP CAPACITOR	1	1,2,3,4,5
C9913	ECJ1VF1C105Z	CHIP CAPACITOR	1	1,2,3,4,5
C9914	ECJ1VF1C105Z	CHIP CAPACITOR	1	1,2,3,4,5
C9915	ECJ1VF1C105Z	CHIP CAPACITOR	1	1,2,3,4,5
C9916	ECJ1VF1C105Z	CHIP CAPACITOR	1	1,2,3,4,5
C9917	F1H1H1510001	CHIP CAPACITOR	1	1,2,3,4,5
C9918	F1H1H1510001	CHIP CAPACITOR	1	1,2,3,4,5
CN7800	K1KB18B00012	CONNECTOR	1	1,2,3,4,5
CN9001	K1KB11B00013	CONNECTOR	1	1,2,3,4,5
CN9003	K1KB12B00030	CONNECTOR	1	1,2,3,4,5
D1140	B0EDKT000009	DIODE	1	1,2,3,4,5
D1151	B0HAGM000006	DIODE	1	1,2,3,4,5
D1152	MAZ4100NMF	DIODE	1	1,2,3,4,5
D1155	MAZ73000BC	DIODE	1	1,2,3,4,5
D1156	MA2C165001VT	DIODE	1	1,2,3,4,5
D1157	B0HADV000001	DIODE	1	1,2,3,4,5
D1270	B0JBSG000010	DIODE	1	1,2,3,4,5
D1502	MAZ40390HF	DIODE	1	1,2,3,4,5
D1504	B0JCPE000015	DIODE	1	1,2,3,4,5
D1601	B0JCPD000021	DIODE	1	1,2,3,4,5
D1701	B0JCPD000021	DIODE	1	1,2,3,4,5
D1800	MA2J11100L	CHIP DIODE	1	1,2,3,4,5
D3901	B0JDCE000002	DIODE	1	1,2,3,4,5
D4005	MA3Z142D0LG	DIODE	1	1,2,3,4,5
D4006	MA3Z142D0LG	DIODE	1	1,2,3,4,5
D56101	MA2J72800L	DIODE	1	1,2,3,4,5
D7301	MA2C165001VT	DIODE	1	1,2,3,4,5
D7501	B0BA03600021	DIODE	1	1,2,3,4,5
D7504	MAZ4220NLF	DIODE	1	1,2,3,4,5
D7505	B0AADM000003	DIODE	1	1,2,3,4,5
D7506	B0AADM000003	DIODE	1	1,2,3,4,5
D7507	B0JAMD000026	DIODE	1	1,2,3,4,5
D7508	MAZ4180NHF	DIODE	1	1,2,3,4,5
D7509	MA2C723001VT	DIODE	1	1,2,3,4,5
D7510	MA2C165001VT	DIODE	1	1,2,3,4,5
D7511	B0ACCK000005	DIODE	1	1,2,3,4,5
D7512	B0ACCK000005	DIODE	1	1,2,3,4,5

Ref. No.	Part No.	Part Name & Description	PCS	Remarks
D7800	MAZ4300NMF	DIODE	1	1,2,3,4,5
D7801	MA2C723001VT	DIODE	1	1,2,3,4,5
D7802	MAZ409100F	DIODE	1	1,2,5
D9201	B0CCAB000039	DIODE	1	1,2,3,4,5
DP7501	A2BD00000145	FL DISPLAY	1	1,2,3,4,5
F1101	K5D202BK0005	FUSE	1	⚠ 1,2,3,4,5
FL6101	F1H0J1050025	CERAMIC CAPACITOR	1	1,2,3,4,5
FL6102	F1H0J1050025	CERAMIC CAPACITOR	1	1,2,3,4,5
FL6103	F1H0J1050025	CERAMIC CAPACITOR	1	1,2,3,4,5
FL6104	F1H0J1050025	CERAMIC CAPACITOR	1	1,2,3,4,5
FL6105	F1H0J1050025	CERAMIC CAPACITOR	1	1,2,3,4,5
FL6106	F1H0J1050025	CERAMIC CAPACITOR	1	1,2,3,4,5
FL6110	F1H0J1050025	CERAMIC CAPACITOR	1	1,2,3,4,5
FP6101	K1MN40AA0082	CONNECTOR	1	1,2,3,4,5
IC1150	C0DACZH00017	POWER SUPPLY IC	1	1,2,3,4,5
IC1200	C0DAEMB00003	POWER SUPPLY IC	1	1,2,3,4,5
IC1504	C0CBCYG00004	POWER SUPPLY IC	1	1,2,3,4,5
IC1506	C0CBCYG00004	POWER SUPPLY IC	1	1,2,3,4,5
IC1508	C0DBAJG00011	POWER SUPPLY IC	1	1,2,3,4,5
IC1520	C0CBCDC00052	POWER SUPPLY IC	1	1,2,3,4,5
IC1521	C0CBCBD00048	POWER SUPPLY IC	1	1,2,3,4,5
IC1522	C0EBJ0000143	RESET IC	1	1,2,3,4,5
IC1601	C0DBAZZ00132	POWER SUPPLY IC	1	1,2,3,4,5
IC1701	C0DBAZZ00132	POWER SUPPLY IC	1	1,2,3,4,5
IC3001	C1AB00002379	INTEGRATED CIRCUIT	1	1,2,3,4,5
IC4009	C0ABBB000216	AMPLIFIERS	1	1,2,3,4,5
IC4011	C0DBAHD00013	VOLTAGE REGULATOR	1	1,2,3,4,5
IC4901	B3ZAZ0000017	OPTICAL LINK	1	1,2,3,4,5
IC6101	C0JBAZ002116	INTEGRATED CIRCUIT	1	1,2,3,4,5
IC6102	C0JBAZ002116	INTEGRATED CIRCUIT	1	1,2,3,4,5
IC6103	MN8647011	HDMI LSI IC	1	1,2,3,4,5
IC6104	C0CBCBD00048	POWER SUPPLY IC	1	1,2,3,4,5
IC6105	C0CBCDC00052	POWER SUPPLY IC	1	1,2,3,4,5
IC6107	C0JBAB000604	INTEGRATED CIRCUIT	1	1,2,3,4,5
IC7301	C0ZBZ0001081	INTEGRATED CIRCUIT	1	2,5
IC7301	C1AB00002225	INTEGRATED CIRCUIT	1	1,3,4
IC7401	C0CBCYG00004	POWER SUPPLY IC	1	1,2,3,4,5
IC7403	C0CBCDD00025	POWER SUPPLY IC	1	1,2,3,4,5
IC7404	RFKFM6016KT	EEPROM	1	1,2,5 SPC
IC7404	RFKFM6016K	EEPROM	1	3,4 SPC
IC7405	C0CBCBC00174	POWER SUPPLY IC	1	1,2,3,4,5
IC7501	C2CBJG000726	INTEGRATED CIRCUIT	1	2,3,4,5
IC7501	C2CBYY000298	INTEGRATED CIRCUIT	1	1
IC7502	C0EBE0000504	INTEGRATED CIRCUIT	1	1,2,3,4,5
IC7504	C0HBB0000044	DISPLAY DRIVER IC	1	1,2,3,4,5
IC7505	C0EBJ0000153	RESET IC	1	1,2,3,4,5
IC7507	C0CBCDD00025	POWER SUPPLY IC	1	1,2,3,4,5
IC7800	C0DBGYY00033	POWER SUPPLY IC	1	1,2,5
IC7801	C0CBCDD00025	POWER SUPPLY IC	1	1,2,3,4,5
IC9001	C1AB00002208	INTEGRATED CIRCUIT	1	1,2,3,4,5
IC9201	C0JBAB000706	INTEGRATED CIRCUIT	1	1,2,3,4,5
IC9301	C3ABQG000083	SDRAM	1	1,2,3,4,5
IC9302	C3FBMD000166	16 MBIT LOW VOLTAGE	1	1,2,3,4,5
IC9303	C0EBE0000504	INTEGRATED CIRCUIT	1	1,2,3,4,5
IC9901	C0ABBB000216	AMPLIFIERS	1	1,2,3,4,5
IP1501	K5H302100004	CHIP FUSE	1	1,2,3,4,5
IP1601	K5H3022A0013	FUSE	1	⚠ 1,2,3,4,5
IP7501	K5H7512A0010	FUSE	1	⚠ 1,2,3,4,5
IR7501	PNA4618M09VT	IR RECEIVER	1	1,2,3,4,5
JA1	ERJ6GEY0R00Z	CHIP RESISTOR	1	1,2,3,4,5
JA10	ERJ8GEY0R00V	CHIP RESISTOR	1	1,2,3,4,5
JA11	ERJ8GEY0R00V	CHIP RESISTOR	1	1,2,3,4,5
JA12	ERJ8GEY0R00V	CHIP RESISTOR	1	1,2,3,4,5
JA2	ERJ6GEY0R00Z	CHIP RESISTOR	1	1,2,3,4,5
JA3	ERJ6GEY0R00Z	CHIP RESISTOR	1	1,2,3,4,5
JA4	ERJ6GEY0R00Z	CHIP RESISTOR	1	1,2,3,4,5
JA5	ERJ6GEY0R00Z	CHIP RESISTOR	1	1,2,3,4,5
JK3001	K1U822B00003	CONNECTOR	1	1,2,3,4,5
JK3002	K2HE1YYB0002	JACKS	1	1,2,3,4,5

Ref. No.	Part No.	Part Name & Description	PCS	Remarks
JK3901	K1FB242B0005	21 PIN SCART	1	1,2,3,4,5
JK3903	K2HA306B0085	JACKS	1	1,2,3,4,5
K3092	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
K3093	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
K7306	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
K7307	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
K7404	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
K7489	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
K7490	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
K7510	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
L1120	G0B233D00001	LINE FILTER	1	⚠ 1,2,3,4,5
L1270	G0A100H00025	CHOKE COIL	1	1,2,3,4,5
L1400	G0A100HA0023	CHOKE COIL	1	1,2,3,4,5
L1501	G0C2R2JA0019	CHOKE COIL AXIAL	1	1,2,3,4,5
L1502	G0A330ZA0042	CHOKE COIL	1	1,2,3,4,5
L1504	G0A220GA0026	CHOKE COIL RADIAL	1	1,2,3,4,5
L1505	G0A100HA0023	CHOKE COIL	1	1,2,3,4,5
L1601	G0A150ZA0041	CHOKE COIL	1	1,2,3,4,5
L1701	G0A220ZA0041	CHOKE COIL	1	1,2,3,4,5
L4001	G0C270JA0019	CHOKE COIL AXIAL	1	1,2,3,4,5
L4901	G0C220JA0019	CHOKE COIL AXIAL	1	1,2,3,4,5
L56101	J0MAB0000170	BEAD CORE	1	1,2,3,4,5
L56102	J0MAB0000170	BEAD CORE	1	1,2,3,4,5
L56103	J0MAB0000170	BEAD CORE	1	1,2,3,4,5
L56104	J0MAB0000170	BEAD CORE	1	1,2,3,4,5
L7301	G0C1R0JA0019	CHOKE COIL AXIAL	1	1,2,3,4,5
L7302	G0C470JA0019	CHOKE COIL AXIAL	1	2,5
L7302	G0C2R2JA0019	CHOKE COIL AXIAL	1	1,2,3,4,5
L7401	G0A220GA0026	CHOKE COIL RADIAL	1	1,2,3,4,5
L7501	G0C390JA0055	PEAKING COIL RADIAL	1	1,2,3,4,5
L7502	G0C220JA0019	CHOKE COIL AXIAL	1	1,2,3,4,5
L7800	G0C220JA0019	CHOKE COIL AXIAL	1	1,2,3,4,5
L9005	J0JJC0000015	BEAD CORE	1	1,2,3,4,5
L9007	J0JJC0000015	BEAD CORE	1	1,2,3,4,5
L9008	G1CR15M00002	CHIP INDUCTOR	1	1,2,3,4,5
L9201	ELJNA2R7JFB	CHIP INDUCTOR	1	1,2,3,4,5
L9501	ELJFA1R0MFB	CHIP INDUCTOR	1	1,2,3,4,5
L9502	J0JJC0000015	BEAD CORE	1	1,2,3,4,5
L9503	ELJFA150KFB	CHIP INDUCTOR	1	1,2,3,4,5
L9504	ELJFA100JFB	CHIP INDUCTOR	1	1,2,3,4,5
L9505	ELJFA100JFB	CHIP INDUCTOR	1	1,2,3,4,5
L9801	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
L9802	J0JDC0000002	BEAD CORE	1	1,2,3,4,5
L9803	J0JHC0000075	BEAD CORE	1	1,2,3,4,5
L9804	ELJPA270KFB	CHIP INDUCTOR	1	1,2,3,4,5
L9903	ELJFA330KFB	CHIP INDUCTOR	1	1,2,3,4,5
LB1126	ERJ6GEY0R00Z	CHIP RESISTOR	1	1,2,3,4,5
LB1502	J0JKB0000003	BEAD CORE	1	1,2,3,4,5
LB1503	J0JKB0000003	BEAD CORE	1	1,2,3,4,5
LB1504	J0JKB0000003	BEAD CORE	1	1,2,3,4,5
LB1506	J0JKB0000003	BEAD CORE	1	1,2,3,4,5
LB1508	J0JKB0000003	BEAD CORE	1	1,2,3,4,5
LB1509	J0JCC0000060	BEAD CORE	1	1,2,3,4,5
LB1600	J0JHC0000048	BEAD CORE	1	1,2,3,4,5
LB1700	J0JHC0000048	BEAD CORE	1	1,2,3,4,5
LB3001	J0JGC0000020	BEAD CORE	1	1,2,3,4,5
LB3002	J0JGC0000020	BEAD CORE	1	1,2,3,4,5
LB3003	J0JGC0000020	BEAD CORE	1	1,2,3,4,5
LB3005	J0JBC0000011	BEAD CORE	1	1,2,3,4,5
LB3006	J0JGC0000020	BEAD CORE	1	1,2,3,4,5
LB3007	J0JBC0000011	BEAD CORE	1	1,2,3,4,5
LB3008	J0JGC0000020	BEAD CORE	1	1,2,3,4,5
LB3009	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
LB3010	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
LB3011	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
LB3012	J0JBC0000011	BEAD CORE	1	1,2,3,4,5
LB3013	J0JBC0000011	BEAD CORE	1	1,2,3,4,5
LB3901	J0JCC0000103	BEAD CORE	1	1,2,3,4,5
LB3902	J0JCC0000103	BEAD CORE	1	1,2,3,4,5
LB3903	J0JCC0000103	BEAD CORE	1	1,2,3,4,5
LB3907	J0JBC0000011	BEAD CORE	1	1,2,3,4,5
LB3908	J0JBC0000011	BEAD CORE	1	1,2,3,4,5
LB3911	J0JGC0000020	BEAD CORE	1	1,2,3,4,5
LB3912	J0JBC0000011	BEAD CORE	1	1,2,3,4,5
LB3913	J0JBC0000011	BEAD CORE	1	1,2,3,4,5
LB6101	J0JHC0000032	BEAD CORE	1	1,2,3,4,5
LB6102	J0JHC0000032	BEAD CORE	1	1,2,3,4,5
LB6103	J0JHC0000032	BEAD CORE	1	1,2,3,4,5
LB6104	J0JCC0000119	FERRITE CORE	1	1,2,3,4,5
LB6105	J0JCC0000119	FERRITE CORE	1	1,2,3,4,5
LB6106	J0JCC0000119	FERRITE CORE	1	1,2,3,4,5
LB6107	J0JCC0000119	FERRITE CORE	1	1,2,3,4,5
LB6108	J0JHC0000032	BEAD CORE	1	1,2,3,4,5
LB6109	J0JHC0000032	BEAD CORE	1	1,2,3,4,5
LB6110	J0JHC0000032	BEAD CORE	1	1,2,3,4,5
LB6111	J0JHC0000032	BEAD CORE	1	1,2,3,4,5
LB6112	J0JHC0000032	BEAD CORE	1	1,2,3,4,5
LB6115	J0JHC0000032	BEAD CORE	1	1,2,3,4,5
LB6116	J0JHC0000032	BEAD CORE	1	1,2,3,4,5
LB6801	J0JHC0000032	BEAD CORE	1	1,2,3,4,5
LB6802	J0JHC0000045	BEAD CORE	1	1,2,3,4,5
LB7301	ERJ6GEY0R00Z	CHIP RESISTOR	1	1,2,3,4,5
LB7302	J0JBC0000011	BEAD CORE	1	1,2,3,4,5
LB7303	ERJ6GEY0R00Z	CHIP RESISTOR	1	1,2,3,4,5
LB7402	J0JKB0000012	BEAD CORE	1	1,2,3,4,5
LB7403	J0JHC0000032	BEAD CORE	1	1,2,3,4,5
LB7405	J0JKB0000012	BEAD CORE	1	1,2,3,4,5
LB7407	J0JKB0000003	BEAD CORE	1	1,2,3,4,5
LB7409	J0JKB0000003	BEAD CORE	1	1,2,3,4,5
LB7410	J0JGC0000020	BEAD CORE	1	1,2,3,4,5
LB7412	J0JGC0000020	BEAD CORE	1	1,2,3,4,5
LB7413	J0JBC0000011	BEAD CORE	1	1,2,3,4,5
LB7414	J0JCC0000060	BEAD CORE	1	1,2,3,4,5
LB7501	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
LB7502	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
LB7507	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
LB7508	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
LB7509	J0JCC0000060	BEAD CORE	1	1,2,3,4,5
LB7510	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
LB7515	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
LB7516	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
LB7517	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
LB7518	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
LB7519	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
LB7800	J0JHC0000032	BEAD CORE	1	1,2,3,4,5
LB7801	J0JHC0000032	BEAD CORE	1	1,2,3,4,5
LB7802	J0JHC0000032	BEAD CORE	1	1,2,3,4,5
LB7803	J0JHC0000032	BEAD CORE	1	1,2,3,4,5
LB7804	J0JHC0000032	BEAD CORE	1	1,2,3,4,5
P1101	K2AA2H000007	AC INLET	1	⚠ 1,2,3,4,5
P1102	K1KB23A00004	CONNECTOR	1	1,2,3,4,5
P1103	K1KA03AA0192	CONNECTOR	1	1,2,3,4,5
P1501	K1KA23A00003	CONNECTOR	1	1,2,3,4,5
P1503	K1KA04AA0180	CONNECTOR	1	1,2,3,4,5
P37001	K1KA06B00181	CONNECTOR	1	1,2,3,4,5
P37002	K2HZ104B0012	CONNECTOR	1	1,2,3,4,5
P56101	K1KY10BA0033	CONNECTOR	1	1,2,3,4,5
P56102	K1FA119E0002	CONNECTOR	1	1,2,3,4,5
P6801	K1NA09E00075	CONNECTOR	1	1,2,3,4,5
P6802	K1MY20AA0021	CONNECTOR	1	1,2,3,4,5
P7402	K1KA88A00002	CONNECTOR	1	1,2,3,4,5
P7412	K1KA12AA0288	CONNECTOR	1	1,2,3,4,5
P7413	K1KA11AA0288	CONNECTOR	1	1,2,3,4,5
P7501	K1KY10AA0107	CONNECTOR	1	1,2,3,4,5
PP7401	K1KA18AA0288	CONNECTOR	1	1,2,3,4,5
Q1200	B3PBA0000402	PHOTO COUPLER	1	⚠ 1,2,3,4,5
Q1501	2SD1819A0L	TRANSISTOR	1	1,2,3,4,5
Q1502	B1DHED000008	TRANSISTOR	1	1,2,3,4,5
Q1600	B1DHED000008	TRANSISTOR	1	1,2,3,4,5
Q1700	B1DHDD000022	TRANSISTOR	1	1,2,3,4,5
Q4006	2SD132800L	CHIP TRANSISTOR	1	1,2,3,4,5
Q4007	2SD132800L	CHIP TRANSISTOR	1	1,2,3,4,5
Q4008	2SD1819A0L	TRANSISTOR	1	1,2,3,4,5

Ref. No.	Part No.	Part Name & Description	PCS	Remarks
Q4009	2SD1819A0L	TRANSISTOR	1	1,2,3,4,5
Q4060	2SD1819A0L	TRANSISTOR	1	1,2,3,4,5
Q56001	2SD1819A0L	TRANSISTOR	1	1,2,3,4,5
Q56002	2SD1819A0L	TRANSISTOR	1	1,2,3,4,5
Q56101	2SD1819A0L	TRANSISTOR	1	1,2,3,4,5
Q56102	B1CFHA000002	TRANSISTOR	1	1,2,3,4,5
Q56103	B1CFHA000002	TRANSISTOR	1	1,2,3,4,5
Q56104	2SD1819A0L	TRANSISTOR	1	1,2,3,4,5
Q56105	2SD1819A0L	TRANSISTOR	1	1,2,3,4,5
Q7501	2SB1218A0L	SS-TRANSISTOR	1	1,2,3,4,5
Q7502	2SD1819A0L	TRANSISTOR	1	1,2,3,4,5
Q7503	2SB1218A0L	SS-TRANSISTOR	1	1,2,3,4,5
Q7504	2SD1819A0L	TRANSISTOR	1	1,2,3,4,5
Q7505	2SD1819A0L	TRANSISTOR	1	1,2,3,4,5
Q7509	2SD0602ARL	TRANSISTOR	1	1,2,3,4,5
Q7510	B1BABK000001	POWER TRANSISTOR	1	1,2,3,4,5
Q7511	2SB0709A0L	PNP TRANSISTOR	1	1,2,3,4,5
Q7514	2SD0601A0L	TRANSISTOR	1	1,2,3,4,5
Q7515	2SD1819A0L	TRANSISTOR	1	1,2,3,4,5
Q7516	2SD1819A0L	TRANSISTOR	1	1,2,3,4,5
Q7517	2SD1819A0L	TRANSISTOR	1	1,2,3,4,5
Q7800	2SD1819A0L	TRANSISTOR	1	1,2,3,4,5
Q7801	2SD1819A0L	TRANSISTOR	1	1,2,3,4,5
Q9201	2SB0709A0L	PNP TRANSISTOR	1	1,2,3,4,5
QR1501	B1GBCFNN0009	TRANSISTOR	1	1,2,3,4,5
QR1502	B1GBCFNN0009	TRANSISTOR	1	1,2,3,4,5
QR1800	B1GDCFNN0002	TRANSISTOR	1	1,2,3,4,5
QR1801	B1GBCFNN0004	TRANSISTOR	1	1,2,3,4,5
QR3901	B1GDCFJJ0008	DIGITAL TRANSISTOR	1	1,2,3,4,5
QR3902	B1GBCFNN0009	TRANSISTOR	1	1,2,3,4,5
QR4002	B1GDCFJJ0008	DIGITAL TRANSISTOR	1	1,2,3,4,5
QR7401	B1GBCFNN0009	TRANSISTOR	1	1,2,3,4,5
QR7503	B1GBCFNN0009	TRANSISTOR	1	1,2,3,4,5
QR7504	B1GBCFNN0009	TRANSISTOR	1	1,2,3,4,5
QR7507	B1GBCFNN0009	TRANSISTOR	1	1,2,3,4,5
QR7508	B1GBCFJN0009	TRANSISTOR	1	1,2,3,4,5
R1150	ERJ6GEYJ180V	CHIP RESISTOR	1	1,2,3,4,5
R1151	ERJ6GEYJ682V	CHIP RESISTOR	1	1,2,3,4,5
R1152	ERJ6GEYJ103V	CHIP RESISTOR	1	1,2,3,4,5
R1153	ERJ6GEYJ180V	CHIP RESISTOR	1	1,2,3,4,5
R1154	ERJ6GEYG912V	CHIP RESISTOR	1	1,2,3,4,5
R1155	ERJ6GEYG752V	CHIP RESISTOR	1	1,2,3,4,5
R1156	ERJ6GEYG163V	CHIP RESISTOR	1	1,2,3,4,5
R1157	ERJ6GEYG511V	CHIP RESISTOR	1	1,2,3,4,5
R1158	ERX2SJR22E	METAL FILM RESISTOR	1	1,2,3,4,5
R1200	ERJ6GEYG122V	CHIP RESISTOR	1	1,2,3,4,5
R1201	ERJ6GEYG822V	CHIP RESISTOR	1	1,2,3,4,5
R1205	ERJ6GEYJ224V	CHIP RESISTOR	1	1,2,3,4,5
R1206	ERJ6GEYG242V	CHIP RESISTOR	1	1,2,3,4,5
R1207	ERJ6GEYJ103V	CHIP RESISTOR	1	1,2,3,4,5
R1208	ERJ6GEYJ222V	CHIP RESISTOR	1	1,2,3,4,5
R1209	ERJ6GEYJ102V	CHIP RESISTOR	1	1,2,3,4,5
R1210	ERJ6GEYJ102V	CHIP RESISTOR	1	1,2,3,4,5
R1501	D0GB331JA057	CHIP RESISTOR	1	1,2,3,4,5
R1503	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R1505	D0GB104JA057	CHIP RESISTOR	1	1,2,3,4,5
R1506	ERJ3RBD202V	CHIP RESISTOR	1	1,2,3,4,5
R1507	ERJ3RBD182V	CHIP RESISTOR	1	1,2,3,4,5
R1508	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R1509	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R1510	ERJ3RBD202V	CHIP RESISTOR	1	1,2,3,4,5
R1511	ERJ3RBD182V	CHIP RESISTOR	1	1,2,3,4,5
R1513	D0GB273JA057	CHIP RESISTOR	1	1,2,3,4,5
R1515	D1BB1201A010	CHIP RESISTOR	1	1,2,3,4,5
R1516	D1BB1001A010	CHIP RESISTOR	1	1,2,3,4,5
R1517	D0GB470JA057	CHIP RESISTOR	1	1,2,3,4,5
R1518	D0GB223JA057	CHIP RESISTOR	1	1,2,3,4,5
R1519	D0GB223JA057	CHIP RESISTOR	1	1,2,3,4,5
R1601	D1BFR0240001	RESISTOR ARRAY	1	1,2,3,4,5
R1602	ERJ6GEYJ513V	CHIP RESISTOR	1	1,2,3,4,5
R1603	ERJ6RBD202V	CHIP RESISTOR	1	1,2,3,4,5
R1604	ERJ6RBD822V	CHIP RESISTOR	1	1,2,3,4,5
R1605	ERJ6RBD272V	CHIP RESISTOR	1	1,2,3,4,5
R1701	D1BFR0240001	RESISTOR ARRAY	1	1,2,3,4,5
R1702	D0GB513JA057	CHIP RESISTOR	1	1,2,3,4,5
R1703	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R1704	ERJ3RBD123V	CHIP RESISTOR	1	1,2,3,4,5
R1705	ERJ3RBD562V	CHIP RESISTOR	1	1,2,3,4,5
R1800	ERJ6GEYJ471V	CHIP RESISTOR	1	1,2,3,4,5
R1801	ERJ6GEYJ104V	CHIP RESISTOR	1	1,2,3,4,5
R1802	ERJ6GEYJ472V	CHIP RESISTOR	1	1,2,3,4,5
R1803	ERJ6GEYJ103V	CHIP RESISTOR	1	1,2,3,4,5
R3001	J0JCC0000103	BEAD CORE	1	1,2,3,4,5
R3002	D0GB471JA057	CHIP RESISTOR	1	1,2,3,4,5
R3003	J0JCC0000103	BEAD CORE	1	1,2,3,4,5
R3004	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R3005	D0GB471JA057	CHIP RESISTOR	1	1,2,3,4,5
R3007	D0GB330JA057	CHIP RESISTOR	1	1,2,3,4,5
R3008	D0GB471JA057	CHIP RESISTOR	1	1,2,3,4,5
R3009	D0GB471JA057	CHIP RESISTOR	1	1,2,3,4,5
R3037	D0GB104JA057	CHIP RESISTOR	1	1,2,3,4,5
R3038	J0JCC0000103	BEAD CORE	1	1,2,3,4,5
R3039	J0JCC0000103	BEAD CORE	1	1,2,3,4,5
R3040	J0JCC0000103	BEAD CORE	1	1,2,3,4,5
R3041	J0JCC0000103	BEAD CORE	1	1,2,3,4,5
R3042	J0JCC0000103	BEAD CORE	1	1,2,3,4,5
R3048	D0GB102JA057	CHIP RESISTOR	1	1,2,3,4,5
R3054	D0GB750JA057	CHIP RESISTOR	1	1,2,3,4,5
R3055	D0GB750JA057	CHIP RESISTOR	1	1,2,3,4,5
R3056	D0GB750JA057	CHIP RESISTOR	1	1,2,3,4,5
R3057	D0GB750JA057	CHIP RESISTOR	1	1,2,3,4,5
R3058	D0GB750JA057	CHIP RESISTOR	1	1,2,3,4,5
R3059	D0GB750JA057	CHIP RESISTOR	1	1,2,3,4,5
R3060	D0GB750JA057	CHIP RESISTOR	1	1,2,3,4,5
R3061	D0GB750JA057	CHIP RESISTOR	1	1,2,3,4,5
R3062	D0GB750JA057	CHIP RESISTOR	1	1,2,3,4,5
R3901	D1BB75R0A010	CHIP RESISTOR	1	1,2,3,4,5
R3902	D1BB75R0A010	CHIP RESISTOR	1	1,2,3,4,5
R3903	D1BB75R0A010	CHIP RESISTOR	1	1,2,3,4,5
R3904	ERDS2TJ471T	CARBON RESISTOR	1	1,2,3,4,5
R3905	D0GB153JA057	CHIP RESISTOR	1	1,2,3,4,5
R3906	D0GB223JA057	CHIP RESISTOR	1	1,2,3,4,5
R3912	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R3913	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R3914	D0GB471JA057	CHIP RESISTOR	1	1,2,3,4,5
R3918	D0GB471JA057	CHIP RESISTOR	1	1,2,3,4,5
R3919	D1BB75R0A010	CHIP RESISTOR	1	1,2,3,4,5
R3920	D1BB75R0A010	CHIP RESISTOR	1	1,2,3,4,5
R3921	D1BB75R0A010	CHIP RESISTOR	1	1,2,3,4,5
R3922	D0GB471JA057	CHIP RESISTOR	1	1,2,3,4,5
R3923	D0GB471JA057	CHIP RESISTOR	1	1,2,3,4,5
R3924	ERDS2TJ471T	CARBON RESISTOR	1	1,2,3,4,5
R3925	D1BB75R0A010	CHIP RESISTOR	1	1,2,3,4,5
R3926	D1BB75R0A010	CHIP RESISTOR	1	1,2,3,4,5
R3927	D1BB75R0A010	CHIP RESISTOR	1	1,2,3,4,5
R3928	D1BB75R0A010	CHIP RESISTOR	1	1,2,3,4,5
R3929	D0GB750JA057	CHIP RESISTOR	1	1,2,3,4,5
R3930	D0GB750JA057	CHIP RESISTOR	1	1,2,3,4,5
R3932	D0GB750JA057	CHIP RESISTOR	1	1,2,3,4,5
R3934	D1BB75R0A010	CHIP RESISTOR	1	1,2,3,4,5
R3935	D0GB750JA057	CHIP RESISTOR	1	1,2,3,4,5
R3975	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R3976	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R3983	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R3984	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R3987	D0GB473JA057	CHIP RESISTOR	1	1,2,3,4,5
R3988	D0GB102JA057	CHIP RESISTOR	1	1,2,3,4,5
R3989	D0GB102JA057	CHIP RESISTOR	1	1,2,3,4,5
R3990	D0GB473JA057	CHIP RESISTOR	1	1,2,3,4,5
R3991	D0GB473JA057	CHIP RESISTOR	1	1,2,3,4,5
R3992	D0GB102JA057	CHIP RESISTOR	1	1,2,3,4,5
R3993	D0GB102JA057	CHIP RESISTOR	1	1,2,3,4,5
R3994	D0GB473JA057	CHIP RESISTOR	1	1,2,3,4,5
R4006	D0GB823JA057	CHIP RESISTOR	1	1,2,3,4,5
R4007	D0GB823JA057	CHIP RESISTOR	1	1,2,3,4,5
R4008	D0GB823JA057	CHIP RESISTOR	1	1,2,3,4,5

Ref. No.	Part No.	Part Name & Description	PCS	Remarks
R4013	D0GB823JA057	CHIP RESISTOR	1	1,2,3,4,5
R4046	D0HB912ZA002	CHIP RESISTOR	1	1,2,3,4,5
R4047	D0HB912ZA002	CHIP RESISTOR	1	1,2,3,4,5
R4055	D0HB153ZA002	CHIP RESISTOR	1	1,2,3,4,5
R4057	D0HB153ZA002	CHIP RESISTOR	1	1,2,3,4,5
R4066	D0HB123ZA002	METAL FILM RESISTOR	1	1,2,3,4,5
R4067	D0HB123ZA002	METAL FILM RESISTOR	1	1,2,3,4,5
R4071	D0GB473JA057	CHIP RESISTOR	1	1,2,3,4,5
R4074	D0GB473JA057	CHIP RESISTOR	1	1,2,3,4,5
R4076	D0GB821JA057	CHIP RESISTOR	1	1,2,3,4,5
R4077	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R4078	D0GB272JA057	CHIP RESISTOR	1	1,2,3,4,5
R4079	D0GB272JA057	CHIP RESISTOR	1	1,2,3,4,5
R4080	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R4081	D0GB821JA057	CHIP RESISTOR	1	1,2,3,4,5
R4088	D0GB272JA057	CHIP RESISTOR	1	1,2,3,4,5
R4089	D0GB272JA057	CHIP RESISTOR	1	1,2,3,4,5
R4090	D0GB121JA057	CHIP RESISTOR	1	1,2,3,4,5
R4093	D0GB121JA057	CHIP RESISTOR	1	1,2,3,4,5
R4094	D0GB223JA057	CHIP RESISTOR	1	1,2,3,4,5
R4102	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R4104	D0GB223JA057	CHIP RESISTOR	1	1,2,3,4,5
R4105	D0GB473JA057	CHIP RESISTOR	1	1,2,3,4,5
R56001	ERJ2GEJ472X	RESISTOR	1	1,2,3,4,5
R56002	ERJ2GEJ473X	RESISTOR	1	1,2,3,4,5
R56003	ERJ2GEJ225X	RESISTOR	1	1,2,3,4,5
R56004	ERJ2GEJ104X	RESISTOR	1	1,2,3,4,5
R56101	ERJ2GEJ220X	RESISTOR	1	1,2,3,4,5
R56102	ERJ2GEJ330X	RESISTOR	1	1,2,3,4,5
R56103	ERJ2GEJ330X	RESISTOR	1	1,2,3,4,5
R56104	ERJ2GEJ330X	RESISTOR	1	1,2,3,4,5
R56105	ERJ2GEJ330X	RESISTOR	1	1,2,3,4,5
R56106	ERJ2GEJ820X	RESISTOR	1	1,2,3,4,5
R56107	ERJ2GEJ330X	RESISTOR	1	1,2,3,4,5
R56108	ERJ2GEJ330X	RESISTOR	1	1,2,3,4,5
R56109	ERJ2GEJ121X	RESISTOR	1	1,2,3,4,5
R56110	ERJ2GEJ330X	RESISTOR	1	1,2,3,4,5
R56111	ERJ2GEJ330X	RESISTOR	1	1,2,3,4,5
R56112	ERJ2GEJ330X	RESISTOR	1	1,2,3,4,5
R56114	ERJ2GEJ330X	RESISTOR	1	1,2,3,4,5
R56115	ERJ2GEJ820X	RESISTOR	1	1,2,3,4,5
R56116	ERJ2GEJ101X	RESISTOR	1	1,2,3,4,5
R56117	ERJ2GEJ151X	RESISTOR	1	1,2,3,4,5
R56118	ERJ2GEJ820X	RESISTOR	1	1,2,3,4,5
R56119	ERJ2GEJ330X	RESISTOR	1	1,2,3,4,5
R56120	ERJ2GEJ151X	RESISTOR	1	1,2,3,4,5
R56121	ERJ2GEJ151X	RESISTOR	1	1,2,3,4,5
R56122	ERJ2GEJ151X	RESISTOR	1	1,2,3,4,5
R56123	ERJ2GEJ511X	RESISTOR	1	1,2,3,4,5
R56124	ERJ2GEJ103X	RESISTOR	1	1,2,3,4,5
R56125	ERJ2GEJ202X	RESISTOR	1	1,2,3,4,5
R56126	ERJ2GEJ202X	RESISTOR	1	1,2,3,4,5
R56127	ERJ2GEJ103X	RESISTOR	1	1,2,3,4,5
R56128	ERJ2GEJ202X	RESISTOR	1	1,2,3,4,5
R56129	ERJ2GEJ202X	RESISTOR	1	1,2,3,4,5
R56130	ERJ2GEJ273X	RESISTOR	1	1,2,3,4,5
R56131	ERJ2GEJ221X	RESISTOR	1	1,2,3,4,5
R56132	ERJ2GEJ224X	RESISTOR	1	1,2,3,4,5
R56133	ERJ2GEJ104X	RESISTOR	1	1,2,3,4,5
R56134	ERJ2GEJ470X	RESISTOR	1	1,2,3,4,5
R56135	ERJ2GEJ470X	RESISTOR	1	1,2,3,4,5
R56137	ERJ2GE0R00X	RESISTOR	1	1,2,3,4,5
R56138	ERJ2GE0R00X	RESISTOR	1	1,2,3,4,5
R56139	ERJ2GEJ820X	RESISTOR	1	1,2,3,4,5
R56140	ERJ2GEJ8R2X	RESISTOR	1	1,2,3,4,5
R56142	ERJ2GEJ330X	RESISTOR	1	1,2,3,4,5
R56143	ERJ2GEJ330X	RESISTOR	1	1,2,3,4,5
R56144	ERJ2GEJ8R2X	RESISTOR	1	1,2,3,4,5
R56145	ERJ2GEJ8R2X	RESISTOR	1	1,2,3,4,5
R56146	ERJ2GEJ8R2X	RESISTOR	1	1,2,3,4,5
R56147	ERJ2GEJ8R2X	RESISTOR	1	1,2,3,4,5
R56148	ERJ2GEJ8R2X	RESISTOR	1	1,2,3,4,5
R56149	ERJ2GEJ8R2X	RESISTOR	1	1,2,3,4,5

Ref. No.	Part No.	Part Name & Description	PCS	Remarks
R56150	ERJ2GEJ8R2X	RESISTOR	1	1,2,3,4,5
R56151	ERJ2GEJ820X	RESISTOR	1	1,2,3,4,5
R56152	ERJ2GEJ820X	RESISTOR	1	1,2,3,4,5
R56153	ERJ2GEJ820X	RESISTOR	1	1,2,3,4,5
R56154	ERJ2GEJ820X	RESISTOR	1	1,2,3,4,5
R56155	ERJ2GEJ820X	RESISTOR	1	1,2,3,4,5
R56156	ERJ2GEJ820X	RESISTOR	1	1,2,3,4,5
R56157	ERJ2GEJ820X	RESISTOR	1	1,2,3,4,5
R56158	ERJ2GEJ152X	RESISTOR	1	1,2,3,4,5
R56159	ERJ2GEJ332X	RESISTOR	1	1,2,3,4,5
R56160	ERJ2GEJ223X	RESISTOR	1	1,2,3,4,5
R56161	ERJ2GEJ470X	RESISTOR	1	1,2,3,4,5
R6801	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R6802	D0GB220JA057	CHIP RESISTOR	1	1,2,3,4,5
R6803	D0GB220JA057	CHIP RESISTOR	1	1,2,3,4,5
R6804	D0GB223JA057	CHIP RESISTOR	1	1,2,3,4,5
R6805	D0GB123JA057	CHIP RESISTOR	1	1,2,3,4,5
R6807	D0GB223JA057	CHIP RESISTOR	1	1,2,3,4,5
R7301	D0GB912JA057	CHIP RESISTOR	1	2,5
R7302	D0GB122JA057	CHIP RESISTOR	1	2,5
R7302	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R7303	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R7304	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R7305	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7306	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7307	D0GB562JA057	CHIP RESISTOR	1	1,2,3,4,5
R7309	D0GB273JA057	CHIP RESISTOR	1	1,2,3,4,5
R7310	D0GB472JA057	CHIP RESISTOR	1	1,2,3,4,5
R7310	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R7311	D0GB752JA057	CHIP RESISTOR	1	2,5
R7312	D0GB472JA057	CHIP RESISTOR	1	1,2,3,4,5
R7312	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R7313	D0GB332JA057	CHIP RESISTOR	1	1,2,3,4,5
R7313	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R7314	D0GB332JA057	CHIP RESISTOR	1	1,2,3,4,5
R7314	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R7315	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R7315	D0GB221JA057	CHIP RESISTOR	1	1,2,3,4,5
R7316	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R7316	D0GB221JA057	CHIP RESISTOR	1	1,2,3,4,5
R7328	D0GB682JA057	CHIP RESISTOR	1	2,5
R7328	D0GB221JA057	CHIP RESISTOR	1	1,2,3,4,5
R7329	D0GB682JA057	CHIP RESISTOR	1	2,5
R7329	D0GB221JA057	CHIP RESISTOR	1	1,2,3,4,5
R7402	D0GB153JA057	CHIP RESISTOR	1	1,2,3,4,5
R7406	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7410	D0GB821JA057	CHIP RESISTOR	1	1,2,3,4,5
R7411	D0GB472JA057	CHIP RESISTOR	1	1,2,3,4,5
R7412	D0GB472JA057	CHIP RESISTOR	1	1,2,3,4,5
R7421	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7422	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7444	ERJ3GEYJ300V	CHIP RESISTOR	1	1,2,3,4,5
R7445	ERJ3RBD682V	CHIP RESISTOR	1	1,2,3,4,5
R7446	ERJ3RBD202V	CHIP RESISTOR	1	1,2,3,4,5
R7501	D0GB472JA057	CHIP RESISTOR	1	1,2,3,4,5
R7502	D0GB392JA057	CHIP RESISTOR	1	1,2,3,4,5
R7503	D0GB104JA057	CHIP RESISTOR	1	1,2,3,4,5
R7504	D0GB472JA057	CHIP RESISTOR	1	1,2,3,4,5
R7505	D1BB10020004	CHIP RESISTOR	1	1,2,3,4,5
R7506	D0GB104JA057	CHIP RESISTOR	1	1,2,3,4,5
R7507	ERJ3GEYF472V	CHIP RESISTOR	1	1,2,3,4,5
R7509	D0GB331JA057	CHIP RESISTOR	1	1,2,3,4,5
R7510	D0GB331JA057	CHIP RESISTOR	1	1,2,3,4,5
R7512	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7513	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7514	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7516	D0GB220JA057	CHIP RESISTOR	1	1,2,3,4,5
R7517	D0GB472JA057	CHIP RESISTOR	1	1,2,3,4,5
R7518	D0GB273JA057	CHIP RESISTOR	1	1,2,3,4,5
R7519	D0GB472JA057	CHIP RESISTOR	1	1,2,3,4,5
R7520	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R7521	D0GB473JA057	CHIP RESISTOR	1	1,2,3,4,5
R7522	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5

Ref. No.	Part No.	Part Name & Description	PCS	Remarks
R7523	D0GB473JA057	CHIP RESISTOR	1	1,2,3,4,5
R7524	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7525	D0GB474JA057	CHIP RESISTOR	1	1,2,3,4,5
R7526	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7527	D0GB153JA057	CHIP RESISTOR	1	1,2,3,4,5
R7528	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7529	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7530	D0GB471JA057	CHIP RESISTOR	1	1,2,3,4,5
R7531	D0GB104JA057	CHIP RESISTOR	1	1,2,3,4,5
R7532	D0GB332JA057	CHIP RESISTOR	1	1,2,3,4,5
R7533	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R7534	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R7535	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7536	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7537	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7538	D0GB102JA057	CHIP RESISTOR	1	1,2,3,4,5
R7539	D0GB472JA057	CHIP RESISTOR	1	1,2,3,4,5
R7540	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7541	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R7542	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R7543	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R7544	D0GB473JA057	CHIP RESISTOR	1	1,2,3,4,5
R7548	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R7549	D0GB472JA057	CHIP RESISTOR	1	1,2,3,4,5
R7550	D0GB472JA057	CHIP RESISTOR	1	1,2,3,4,5
R7552	D0GB104JA057	CHIP RESISTOR	1	1,2,3,4,5
R7553	D0GB221JA057	CHIP RESISTOR	1	1,2,3,4,5
R7557	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7558	D0GB202JA057	CHIP RESISTOR	1	1,2,3,4,5
R7559	D0GB202JA057	CHIP RESISTOR	1	1,2,3,4,5
R7560	D0GB102JA057	CHIP RESISTOR	1	1,2,3,4,5
R7561	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7562	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7563	D0GB472JA057	CHIP RESISTOR	1	1,2,3,4,5
R7564	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7565	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7566	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7567	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7568	D0GB473JA057	CHIP RESISTOR	1	1,2,3,4,5
R7569	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R7571	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7572	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7573	D0GB273JA057	CHIP RESISTOR	1	1,2,3,4,5
R7574	D0GB223JA057	CHIP RESISTOR	1	1,2,3,4,5
R7575	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7576	D0GB102JA057	CHIP RESISTOR	1	1,2,3,4,5
R7577	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R7578	D0GB224JA057	CHIP RESISTOR	1	1,2,3,4,5
R7580	D0GB225JA057	CHIP RESISTOR	1	1,2,3,4,5
R7581	D0GB104JA057	CHIP RESISTOR	1	1,2,3,4,5
R7582	D0GB104JA057	CHIP RESISTOR	1	1,2,3,4,5
R7583	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7584	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7585	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7586	D0GB823JA057	CHIP RESISTOR	1	1,2,3,4,5
R7587	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R7597	D0GB822JA057	CHIP RESISTOR	1	1,2,3,4,5
R7598	D0GB822JA057	CHIP RESISTOR	1	1,2,3,4,5
R7599	D0GB822JA057	CHIP RESISTOR	1	1,2,3,4,5
R7600	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R7601	D0GB102JA057	CHIP RESISTOR	1	1,2,3,4,5
R7606	ERJ3GEYF393V	CHIP RESISTOR	1	1,2,3,4,5
R7607	D0GB331JA057	CHIP RESISTOR	1	1,2,3,4,5
R7608	ERJ3GEYF433V	CHIP RESISTOR	1	1,2,3,4,5
R7612	D0GB562JA057	CHIP RESISTOR	1	1,2,3,4,5
R7614	D0GB470JA057	CHIP RESISTOR	1	1,2,3,4,5
R7617	ERDS2TJ271T	CARBON RESISTOR	1	1,2,3,4,5
R7621	D0GB104JA057	CHIP RESISTOR	1	1,2,3,4,5
R7623	D0GB181JA057	CHIP RESISTOR	1	1,2,3,4,5
R7639	D0GB272JA057	CHIP RESISTOR	1	1,2,3,4,5
R7640	D0GB272JA057	CHIP RESISTOR	1	1,2,3,4,5
R7641	D0GB272JA057	CHIP RESISTOR	1	1,2,3,4,5
R7642	D0GB562JA057	CHIP RESISTOR	1	1,2,3,4,5

Ref. No.	Part No.	Part Name & Description	PCS	Remarks
R7643	ERJ3GEYJ163V	CHIP RESISTOR	1	1,2,3,4,5
R7644	D0GB562JA057	CHIP RESISTOR	1	1,2,3,4,5
R7648	ERDS2TJ470T	CARBON RESISTOR	1	1,2,3,4,5
R7660	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R7668	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R7669	D0GB472JA057	CHIP RESISTOR	1	1,2,3,4,5
R7800	D0GB472JA057	CHIP RESISTOR	1	1,2,3,4,5
R7801	ERJ3GEYJ155V	CHIP RESISTOR	1	1,2,5
R7802	ERJ6GEYJ473V	CHIP RESISTOR	1	1,2,5
R7803	D0GB334JA057	CHIP RESISTOR	1	1,2,5
R7804	D0GB563JA057	CHIP RESISTOR	1	1,2,5
R7805	D0GB471JA057	CHIP RESISTOR	1	1,2,3,4,5
R7806	D0GB471JA057	CHIP RESISTOR	1	1,2,3,4,5
R7807	ERJ6GEYJ101V	CHIP RESISTOR	1	1,2,3,4,5
R7808	ERJ6GEYJ101V	CHIP RESISTOR	1	1,2,3,4,5
R7809	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R7810	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R7811	ERJ6GEYJ473V	CHIP RESISTOR	1	1,2,5
R9008	D0GB181JA057	CHIP RESISTOR	1	1,2,3,4,5
R9009	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9010	D0GB152JA057	CHIP RESISTOR	1	1,2,3,4,5
R9011	D0GB152JA057	CHIP RESISTOR	1	1,2,3,4,5
R9012	D0GB100JA057	CHIP RESISTOR	1	1,2,3,4,5
R9013	D0GB330JA057	CHIP RESISTOR	1	1,2,3,4,5
R9014	D0GB330JA057	CHIP RESISTOR	1	1,2,3,4,5
R9015	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R9016	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R9017	D1BB10020004	CHIP RESISTOR	1	1,2,3,4,5
R9028	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R9029	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9030	D0GB474JA057	CHIP RESISTOR	1	1,2,3,4,5
R9031	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9032	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9033	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9037	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R9038	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R9200	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R9201	D0GB104JA057	CHIP RESISTOR	1	1,2,3,4,5
R9202	D0GB104JA057	CHIP RESISTOR	1	1,2,3,4,5
R9203	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R9204	D0GB332JA057	CHIP RESISTOR	1	1,2,3,4,5
R9205	D0GB104JA057	CHIP RESISTOR	1	1,2,3,4,5
R9206	D0GB105JA057	CHIP RESISTOR	1	1,2,3,4,5
R9207	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R9208	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R9209	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R9210	D0GB181JA057	CHIP RESISTOR	1	1,2,3,4,5
R9211	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R9212	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9213	D0GB750JA057	CHIP RESISTOR	1	1,2,3,4,5
R9214	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9215	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9216	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9218	D0GB472JA057	CHIP RESISTOR	1	1,2,3,4,5
R9220	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9221	D0GB750JA057	CHIP RESISTOR	1	1,2,3,4,5
R9223	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9224	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9226	D0GB393JA057	CHIP RESISTOR	1	1,2,3,4,5
R9227	D1HG5608A002	RESISTOR ARRAY	1	1,2,3,4,5
R9228	D1HG5608A002	RESISTOR ARRAY	1	1,2,3,4,5
R9229	D1HG5608A002	RESISTOR ARRAY	1	1,2,3,4,5
R9230	D1HG5608A002	RESISTOR ARRAY	1	1,2,3,4,5
R9231	D1HG5608A002	RESISTOR ARRAY	1	1,2,3,4,5
R9232	D1HG5608A002	RESISTOR ARRAY	1	1,2,3,4,5
R9233	D1HG5608A002	RESISTOR ARRAY	1	1,2,3,4,5
R9234	D1HG5608A002	RESISTOR ARRAY	1	1,2,3,4,5
R9235	D1HG5608A002	RESISTOR ARRAY	1	1,2,3,4,5
R9236	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9237	D0GB820JA057	CHIP RESISTOR	1	1,2,3,4,5
R9239	D0GB820JA057	CHIP RESISTOR	1	1,2,3,4,5
R9240	D0GB820JA057	CHIP RESISTOR	1	1,2,3,4,5
R9241	D0GB560JA057	CHIP RESISTOR	1	1,2,3,4,5

Ref. No.	Part No.	Part Name & Description	PCS	Remarks
R9242	D0GB560JA057	CHIP RESISTOR	1	1,2,3,4,5
R9243	D0GB560JA057	CHIP RESISTOR	1	1,2,3,4,5
R9244	D0GB560JA057	CHIP RESISTOR	1	1,2,3,4,5
R9245	D0GB560JA057	CHIP RESISTOR	1	1,2,3,4,5
R9246	D0GB560JA057	CHIP RESISTOR	1	1,2,3,4,5
R9247	J0JDC0000026	BEAD CORE	1	1,2,3,4,5
R9249	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9250	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9254	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9271	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9272	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9301	D0GB330JA057	CHIP RESISTOR	1	1,2,3,4,5
R9302	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9303	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9305	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9306	D0GB472JA057	CHIP RESISTOR	1	1,2,3,4,5
R9307	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9308	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9310	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9311	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9312	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9313	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9314	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9315	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9316	D0GB820JA057	CHIP RESISTOR	1	1,2,3,4,5
R9317	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9318	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9319	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9320	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R9322	D0GB102JA057	CHIP RESISTOR	1	1,2,3,4,5
R9323	D0GB102JA057	CHIP RESISTOR	1	1,2,3,4,5
R9501	D1BB10020004	CHIP RESISTOR	1	1,2,3,4,5
R9502	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R9503	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9504	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
R9505	D1BB2000A010	CHIP RESISTOR	1	1,2,3,4,5
R9506	D1BB33000002	CHIP RESISTOR	1	1,2,3,4,5
R9507	D1BB33000002	CHIP RESISTOR	1	1,2,3,4,5
R9508	D1BB33000002	CHIP RESISTOR	1	1,2,3,4,5
R9509	D1BB33000002	CHIP RESISTOR	1	1,2,3,4,5
R9801	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R9802	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R9803	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R9804	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R9805	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R9806	D0GB101JA057	CHIP RESISTOR	1	1,2,3,4,5
R9903	D0GB240JA057	CHIP RESISTOR	1	1,2,3,4,5
R9904	D0GB240JA057	CHIP RESISTOR	1	1,2,3,4,5
R9905	D0GB240JA057	CHIP RESISTOR	1	1,2,3,4,5
R9906	D0GB240JA057	CHIP RESISTOR	1	1,2,3,4,5
R9907	ERJ3RBD103V	CHIP RESISTOR	1	1,2,3,4,5
R9908	ERJ3RBD103V	CHIP RESISTOR	1	1,2,3,4,5
R9909	ERJ3RBD103V	CHIP RESISTOR	1	1,2,3,4,5
R9910	ERJ3RBD103V	CHIP RESISTOR	1	1,2,3,4,5
R9911	ERJ3RED204V	RESISTOR	1	1,2,3,4,5
R9912	ERJ3RED204V	RESISTOR	1	1,2,3,4,5
R9915	ERJ3RED204V	RESISTOR	1	1,2,3,4,5
R9916	ERJ3RED204V	RESISTOR	1	1,2,3,4,5
R9917	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9918	D0GB103JA057	CHIP RESISTOR	1	1,2,3,4,5
R9919	D0GB471JA057	CHIP RESISTOR	1	1,2,3,4,5
R9920	D0GB471JA057	CHIP RESISTOR	1	1,2,3,4,5
RX6101	D1H83304A024	RESISTOR ARRAY	1	1,2,3,4,5
RX6102	D1H83304A024	RESISTOR ARRAY	1	1,2,3,4,5
RX6801	EXB38V220JV	RESISTOR ARRAY	1	1,2,3,4,5
RX6802	EXB38V123JV	RESISTOR ARRAY	1	1,2,3,4,5
S7002	EVQ11A04M	TOUCH SWITCH	1	1,2,3,4,5
S7500	EVQ11A04M	TOUCH SWITCH	1	1,2,3,4,5
S7501	EVQ11A04M	TOUCH SWITCH	1	1,2,3,4,5
S7503	EVQ11A04M	TOUCH SWITCH	1	1,2,3,4,5
S7504	EVQ11A04M	TOUCH SWITCH	1	1,2,3,4,5
S7505	EVQ11A04M	TOUCH SWITCH	1	1,2,3,4,5
S7506	EVQ11A04M	TOUCH SWITCH	1	1,2,3,4,5

Ref. No.	Part No.	Part Name & Description	PCS	Remarks
S7507	EVQ11A04M	TOUCH SWITCH	1	1,2,3,4,5
S7508	EVQ11A04M	TOUCH SWITCH	1	1,2,3,4,5
SW1	K0L1BA000123	SWITCH	1	1,2,3,4,5
SW4	K0L1BA000078	SWITCH	1	1,2,3,4,5
T1150	ETS28BF1W6AD	TRANSFORMER	1	⚠ 1,2,3,4,5
T7501	G4D1A0000117	SWITCH. TRANSFORMER	1	1,2,3,4,5
TU7800	ENGF7506GF	TUNER	1	⚠ 2,5
TU7800	ENGF7507GF	TUNER	1	⚠ 3,4
TU7800	ENGF7508GF	TUNER	1	⚠ 1
VA1110	ERZVA5V471	SURGE ABSORBER	1	⚠ 1,2,3,4,5
VA6101	D4ED13900002	SURGE ABSORBER	1	1,2,3,4,5
VA6102	D4ED13900002	SURGE ABSORBER	1	1,2,3,4,5
VA6103	EZJZ0V800AA	SURGE ABSORBER	1	1,2,3,4,5
VA6104	D4ED13900002	SURGE ABSORBER	1	1,2,3,4,5
VA6105	EZJZ0V800AA	SURGE ABSORBER	1	1,2,3,4,5
VA6106	D4ED13900002	SURGE ABSORBER	1	1,2,3,4,5
VA6107	EZJZ0V800AA	SURGE ABSORBER	1	1,2,3,4,5
VA6108	D4ED13900002	SURGE ABSORBER	1	1,2,3,4,5
VA6109	EZJZ0V800AA	SURGE ABSORBER	1	1,2,3,4,5
VA6110	D4ED13900002	SURGE ABSORBER	1	1,2,3,4,5
VA6111	EZJZ0V800AA	SURGE ABSORBER	1	1,2,3,4,5
VA6112	D4ED13900002	SURGE ABSORBER	1	1,2,3,4,5
VA6113	D4ED13900002	SURGE ABSORBER	1	1,2,3,4,5
W501	ERJ6GEY0R00Z	CHIP RESISTOR	1	1,2,3,4,5
W502	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W503	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W504	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W505	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W506	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W507	ERJ6GEY0R00Z	CHIP RESISTOR	1	1,2,3,4,5
W508	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W509	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W510	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W511	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W512	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W513	ERJ6GEY0R00Z	CHIP RESISTOR	1	1,2,3,4,5
W514	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W515	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W516	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W517	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W518	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W519	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W520	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W521	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W522	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W523	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W524	ERJ6GEY0R00Z	CHIP RESISTOR	1	1,2,3,4,5
W525	ERJ6GEY0R00Z	CHIP RESISTOR	1	1,2,3,4,5
W526	ERJ6GEY0R00Z	CHIP RESISTOR	1	1,2,3,4,5
W527	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W528	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W529	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W530	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W531	ERJ6GEY0R00Z	CHIP RESISTOR	1	1,2,3,4,5
W532	ERJ6GEY0R00Z	CHIP RESISTOR	1	1,2,3,4,5
W533	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W534	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W535	ERJ6GEY0R00Z	CHIP RESISTOR	1	1,2,3,4,5
W536	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W537	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W538	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W539	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W540	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W541	ERJ6GEY0R00Z	CHIP RESISTOR	1	1,2,3,4,5
W542	ERJ6GEY0R00Z	CHIP RESISTOR	1	1,2,3,4,5
W543	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W545	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W546	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W548	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5

Ref. No.	Part No.	Part Name & Description	PCS	Remarks
W549	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
W550	D0YBR0000020	CHIP RESISTOR	1	1,2,3,4,5
X7301	H0H400400006	CRYSTAL OSCILLATOR	1	2,5
X7301	H0D245500016	CRYSTAL OSCILLATOR	1	1,3,4
X7501	H0D100500018	OSCILLATOR	1	1,2,3,4,5
X7502	H0A327200108	CRYSTAL OCSILLATOR	1	1,2,3,4,5
X9002	H0J270500100	CRYSTAL OSCILLATOR	1	1,2,3,4,5
X9201	H0J270500098	CRYSTAL OSCILLATOR	1	1,2,3,4,5
ZA1103	EYF52BCY	FUSE HOLDER	1	1,2,3,4,5
ZA1104	EYF52BCY	FUSE HOLDER	1	1,2,3,4,5
ZA1105	K9ZZ00001279	EARTH FITTING	1	1,2,3,4,5
ZA1106	K9ZZ00001279	EARTH FITTING	1	1,2,3,4,5
ZA1107	K9ZZ00001279	EARTH FITTING	1	1,2,3,4,5
ZA1150	VSC5603	HEAT SINK	1	1,2,3,4,5
ZA1270	VSC5614	HEAT SINK	1	1,2,3,4,5
ZB7501	RMN0836A-1	FL HOLDER	1	1,2,3,4,5
ZJ3001	K9ZZ00001279	EARTH FITTING	1	1,2,3,4,5
ZJ7401	K9ZZ00001279	EARTH FITTING	1	1,2,3,4,5
ZJ7402	K9ZZ00001279	EARTH FITTING	1	1,2,3,4,5
ZJ7404	K9ZZ00001279	EARTH FITTING	1	1,2,3,4,5
ZJ7420	K9ZZ00001279	EARTH FITTING	1	1,2,3,4,5
ZJ7421	K9ZZ00001279	EARTH FITTING	1	1,2,3,4,5
ZJ7423	K9ZZ00001279	EARTH FITTING	1	1,2,3,4,5
ZJ7501	K9ZZ00001279	EARTH FITTING	1	1,2,3,4,5

17.4. SERVICE FIXTURE AND TOOLS

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	RFKZ0260	Extension Cable Main PCB - RAM/Digital PCB 88 Pin	1	Same as EH50 series (SPC)
	RFKZ0216	Extension Cable Main PCB - Power PCB 23 Pin	1	Same as EH55/ EH56 series (SPC)
	RFKZ0366	Extension FFC HDMI PCB and HDD - RAM/Digital PCB 40 Pin / 500mm	2	Same as E55/E65 series (SPC)
	RFKZ0168	Extension Cable Power PCB - Fan Motor 3 Pin	1	Same as E50/E55 series (SPC)
	RFKZ0339	Extension Cable Main PCB - HDD 4 Pin	1	Same as E55/E65 series (SPC)
	JZS0484	Eject Pin	1	Same as ES15 (SPC)
	RFKZ03D01K	Lead Free Solder 0.3 mm / 100 g Reel	1	Same as ES15 (SPC)
	RFKZ06D01K	Lead Free Solder 0.6 mm / 100 g Reel	1	Same as ES15 (SPC)
	RFKZ010D01	Lead Free Solder 1.0 mm / 100 g Reel	1	Same as ES15 (SPC)
	RFKZ0316	Solder Remover Lead free 10 W temperature Solder / 180 g	1	Same as ES15 (SPC)
	RFKZ0328	Flux	1	Same as ES15 (SPC)
	RFKZ0329	Bottle of Flux	1	Same as ES15 (SPC)